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APPLICATION OF SOUTHWESTERN §  
ELECTRIC POWER COMPANY FOR §  
AUTHORITY TO CHANGE RATES §

BEFORE THE STATE OFFICE  
OF  
ADMINISTRATIVE HEARINGS



WORKPAPERS TO THE DIRECT TESTIMONY OF

ADRIAN NARVAEZ

RATE REGULATION DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

APRIL 8, 2021

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### ATTACHMENTS:

Attachment AN-1	Regulatory Résumé of Adrian Narvaez
Attachment AN-2	Jurisdictional Cost of Service Summary
Attachment AN-3	Class-Functional Cost of Service Summary
Attachment AN-4	Staff's Class Cost of Service Summary
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Attachment AN-6	Staff's Revenue Distribution
Attachment AN-7	Staff's Phase I Proposed Rates

**I. PROFESSIONAL QUALIFICATIONS**

**Q. Please state your name and business address.**

A. Adrian Narvaez, Public Utility Commission of Texas (Commission), 1701 N. Congress Avenue, Austin, TX 78701.

**Q. By whom are you employed and in what capacity?**

A. I am employed by the Commission as a Rate Analyst in the Tariff and Rate Analysis Section of the Rate Regulation Division.

**Q. What are your responsibilities as a Rate Analyst for the Commission?**

A. My principal responsibility is analyzing utility filings on matters relating to rate design and cost allocation. My responsibilities include analyzing utility industry regulatory policy, reviewing tariffs to determine compliance with Commission requirements, and preparing and presenting testimony as an expert witness on cost allocation and rate design issues in contested proceedings before the Commission and the State Office of Administrative Hearings (SOAH).

**Q. Please state your educational background and professional experience.**

A. Attachment AN-1 contains a summary of my regulatory experience and educational background.

**Q. Have you previously filed testimony before the Commission?**

A. Yes. Attachment AN-1 contains a listing of direct testimony I have filed at the Commission.

**II. PURPOSE AND SCOPE OF TESTIMONY**

**Q. What is the purpose of your testimony in this proceeding?**

A. My testimony regarding Southwestern Electric Power Company's (SWEPCO) application will address SWEPCO's proposal to defer Southwest Power Pool (SPP) Open Access Transmission Tariff (OATT) charges that are above or below the net Test Year<sup>1</sup> level into a regulatory asset or liability, SWEPCO's proposal with regards the General Service rate schedule, as well as cost allocation, rate design, and baseline value issues. My testimony will also address, in whole or in part, the following issues from the Commission's Preliminary Order:

52. What are the just and reasonable rates calculated in accordance with PURA and Commission rules? Do the rates comport with the requirements in PURA § 36.003?

58. Are all rate classes at unity? If not, what is the magnitude of the deviation, and what, if anything should be done to address the lack of unity?

59. Has SWEPCO proposed any rate riders? If so, should any of the proposed riders be adopted? If so, what are the appropriate costs to be recovered through the riders, and what are the appropriate terms and conditions of the riders?

63. Should baseline amounts be determined in this proceeding for future SWEPCO TCRF, DCRF, or GCRR, or interim transmission cost of service filings? If so, what are the investment and expense components and amounts?

72. Are SWEPCO's anticipated SPP-related transmission charges a known and measurable change to its Test Year cost of service?

73. Is a TCRF a more appropriate mechanism for recovering these costs?

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<sup>1</sup> SWEPCO's test year is based on the 12-month period from April 1, 2019 through March 31, 2020 under PURA § 36.112(b)(1). Direct Testimony of A. Malcom Smoak at 6, fn. 2 (Oct. 14, 2020) (Smoak Direct).

74. Is it appropriate for a utility to accumulate an expected future increase in expenses through a regulatory asset?

**Q. Please describe your role in this proceeding..**

A. In addition to the specific issues I address further in my testimony, I have prepared Commission Staff's Class Cost of Service Study (CCOSS). In preparing Staff's proposed CCOSS, I incorporated the recommended adjustments presented by Staff witnesses Ruth Stark, Mark Filarowicz, John Poole, and Ramya Ramaswamy. Based on Staff's proposed CCOSS, I calculated Staff's proposed Texas retail rates and Staff's recommended transmission cost recovery factor (TCRF) and distribution cost recovery factor (DCRF) baseline values based on Staff's CCOSS.

### **III. SUMMARY OF RECOMMENDATIONS**

**Q. What is your recommendation?**

A. I recommend that:

- The Commission reject SWEPCO's proposal to track changes in SPP transmission charges from Commission approved Test Year SPP transmission charges.
- Staff's updated CCOSS, as shown in attachment AN-4, be adopted and used to set rates.
- The Commission approve Staff's proposed TCRF and DCRF baselines consistent with Staff's CCOSS as shown in attachment AN-5.
- The Commission reject SWEPCO's revenue distribution proposal because it is inequitable, does not achieve a reasonable movement towards cost, and does not conform to Commission precedent.

- 1           •       The Commission approve a multi-year phased-in revenue distribution approach, as
- 2                   described in my testimony to achieve gradual movement towards cost-based rates
- 3                   for each class in SWEPCO's class cost of service study.
- 4           •       The methodology approved by the Commission in SWEPCO's last base rate case,
- 5                   Docket No. 46449, be used to set class revenue targets for each class in each phase
- 6                   of the revenue distribution implementation.
- 7           •       The Commission reject SWEPCO's proposal to remove the current General Service
- 8                   rate schedule provision that restricts availability to customers with a maximum
- 9                   demand that does not exceed 50 kW.
- 10          •       The Commission require SWEPCO to eliminate the potential for optional customer
- 11               migration between base rates as part of the Company's next major base rate
- 12               proceeding.
- 13          •       The Commission approve Staff's proposed rates as seen in Attachment AN-7.

14   **Q.   What material did you use to prepare your testimony?**

15   A.   In preparation for my testimony, I reviewed the application submitted by SWEPCO to the

16       Commission, the testimony of various SWEPCO witnesses, certain discovery responses,

17       prior Commission dockets, testimony filed by other Staff witnesses in this case, and the

18       Commission's rate filing package.

**IV. DEFERRAL OF CHANGES IN SPP TRANSMISSION CHARGES**

**Q. What is SWEPCO's proposal regarding the deferral of changes in SPP transmission charges?**

A. In the Direct Testimony of SWEPCO witness Thomas P. Brice, SWEPCO proposes that the change between future "net" SPP transmission charges and Test Year net SPP transmission charges approved by the Commission, be tracked and deferred into a regulatory asset or liability until they are addressed in a future TCRF or base-rate proceeding.<sup>2</sup> In his direct testimony, SWEPCO witness John A. Aaron further clarifies SWEPCO's proposal. Mr. Aaron states that "the portion of its ongoing SPP charges that qualify as ATC under 16 TAC § 25.239(b)(1) that is above or below the net ATC component of the baseline TCRF revenue requirement approved in this case be deferred into a regulatory asset or liability until they can be addressed in a future TCRF or base-rate proceeding."<sup>3</sup>

**Q. What are net ATC charges?**

A. Net (Approved Transmission Charges) ATC charges refers to the difference between the charges that SWEPCO is assessed for its use of the SPP transmission system that qualify as ATC under 16 Texas Administrative Code (TAC) § 25.239(b)(1) and the payments that SWEPCO receives for the use of its transmission system.

**Q. What is the reasoning behind SWEPCO's proposal?**

A. SWEPCO argues that the Test Year amount of net transmission charges is not representative of the charges it will experience going forward.<sup>4</sup> Mr. Aaron further argues:

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<sup>2</sup> Direct Testimony of Thomas P. Brice at 12-13 (Oct. 14, 2020) (Brice Direct).

<sup>3</sup> Direct Testimony of John A. Aaron at 30 (Oct. 14, 2020) (Aaron Direct).

<sup>4</sup> Brice Direct at 12.



1 if the SPP charges billed to SWEPCO increase above the amount included  
2 in the Test Year ATC component of the TCRF baseline, then SWEPCO  
3 would under-recover the difference. Conversely, if the SPP charges billed  
4 to SWEPCO decrease below the amount included in the Test Year ATC,  
5 then SWEPCO would over-recover the difference.<sup>5</sup>

6 **Q. Is Mr. Aaron correct that an increase in SPP charges billed to SWEPCO would lead**  
7 **to an under-recovery?**

8 A. No. If SWEPCO's base rates are properly established based on cost, then increases in  
9 SWEPCO's load that cause SWEPCO to incur more net ATC charges should be more or  
10 less matched by increases in base rate revenue recovery from customers. If SWEPCO's  
11 rates are not sufficiently cost-based, then it is possible that SWEPCO could recover in base  
12 rates either more or less than the amount of costs included in the Test Year ATC component  
13 of the TCRF baseline. Furthermore, SWEPCO's proposal does not account for the fact  
14 that SWEPCO receives wholesale transmission revenues from other SPP customers that  
15 offset the ATCs that SWEPCO pays. SWEPCO was asked whether its proposed tracking  
16 proposal would also apply to all SPP OATT revenues received by SWEPCO. In response  
17 to this discovery request, SWEPCO stated that its "SPP OATT cost deferral proposal  
18 encompasses SPP OATT revenues received by SWEPCO associated with transmission  
19 investment that Texas retail customers are paying for through rates approved by the  
20 PUCT."<sup>6</sup> Although SWEPCO's response is not clear, it appears that SWEPCO's proposal  
21 to track increases in SPP transmission charges would only account for future increases or  
22 decreases in the SPP transmission charges and would not account for future changes in  
23 transmission revenues from the baseline transmission revenue amount approved by the

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<sup>5</sup> Aaron Direct at 30.

<sup>6</sup> Southwestern Electric Power Company's Response to Texas Industrial Energy Consumer's First Request for Information at Request No. TIEC 1-23 (Nov. 12, 2020).

Commission. In other words, when SWEPCO states that it will track changes in “net” SPP OATT charges, they refer to SPP OATT charges net from the Commission-approved transmission revenues without accounting for future changes in transmission revenues that might more than offset any increases in transmission costs. It is impossible to determine whether changes in SPP transmission charges would result in an under-recovery of net SPP transmission charges without accounting for changes in transmission revenues.

**Q. Should SWEPCO’s proposal to track ATC charges be adopted?**

A. No. SWEPCO’s proposal to track changes in SPP transmission charges for future recovery is inconsistent with Commission precedent. This proposal is also unreasonable because it fails to account for changes in SPP transmission revenues or for the possibility that SWEPCO might recover sufficient base rate revenues to cover any changes in ATCs.

**Q. Is there a mechanism currently available to SWEPCO that would allow SWEPCO to recover changes in ATC charges?**

A. Yes. The TCRF mechanism is the mechanism available to SWEPCO under Commission rules to account for changes in ATC outside of a base rate case.<sup>7</sup>

**Q. Does the TCRF allow for the type of dollar-for-dollar recovery of all future increases in transmission charges that SWEPCO is seeking with its proposal?**

A. No. The well-established TCRF mechanism does not allow for the type of guaranteed dollar-for-dollar recovery of ATC that SWEPCO is seeking.

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<sup>7</sup> 16 TAC §25.239(b)

1 **Q. Is there Commission precedent for SWEPCO's proposal to recover dollar-for-dollar**  
2 **all future increases in transmission charges?**

3 A. No. No such mechanism has ever been approved for non-ERCOT utilities such as  
4 SWEPCO.

5 **Q. Is SWEPCO's proposal to track changes in SPP charges without accounting for**  
6 **changes in SPP revenues reasonable?**

7 A. No. SWEPCO's proposal is unreasonable because it could result in an over-recovery of  
8 transmission charges if increases in SPP transmission revenues or base rate revenues are not  
9 accounted for in SWEPCO's tracking proposal.

10 **Q. Does PURA or the TCRF rule allow utilities to over-recover transmission charges?**

11 A. No. PURA § 36.209(b), and the TCRF rule<sup>8</sup> that implements PURA § 36.209(b) allow  
12 recovery of "changes in wholesale transmission charges to the electric utility under a tariff  
13 approved by a federal regulatory authority to the extent that the costs or charges **have not**  
14 **otherwise been recovered**. The commission may allow the electric utility to recover only  
15 the costs allocable to retail customers in the state and **may not allow the electric utility to**  
16 **over-recover costs.**"<sup>9</sup>

17 **Q. Is it possible that SWEPCO's proposal lead to over-recovery of transmission costs?**

18 A. Yes. Although SWEPCO has not fully specified how it will seek to recover the costs it  
19 proposes to include in any regulatory asset, by departing from the well-established TCRF  
20 mechanism that exists to address changes in ATCs that occur outside of a base rate case  
21 Test Year, it is highly likely that SWEPCO's proposal would result in SWEPCO over-

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<sup>8</sup> 16 TAC § 25.239.

<sup>9</sup> Public Utility Regulatory Act, Tex. Util. Code. Ann. § 36.209 (PURA) (emphasis added).

recovering its transmission costs. The fact that SWEPCO's proposal ignores offsetting increases in wholesale transmission revenues and base rate revenues further increases the likelihood of over-recovery.

**Q. What is your recommendation?**

A. I recommend that the Commission reject SWEPCO's proposal that the changes between future SPP transmission charges and Test Year net SPP transmission charges approved by the Commission be tracked and deferred into a regulatory asset or liability until they are addressed in a future TCRF or base-rate proceeding.

**V. REVENUE DISTRIBUTION**

**Q. What does the revenue distribution process in ratemaking entail?**

A. The class revenue distribution involves establishing the revenue requirement for each class. The revenue distribution should be informed by the results of the CCOSS. In the rate design phase, subsequent to the revenue distribution, rates are designed for each class to closely match the class revenue requirement established in the revenue distribution phase.

**Q. What is the purpose of the CCOSS?**

A. The purpose of the CCOSS is to determine the level of costs caused by each of the individual classes that the CCOSS is composed of (CCOSS classes). A CCOSS study reflecting the Commission's decisions on any contested cost items or allocation issues indicates for each of the CCOSS classes the level of costs caused by those classes. Just and reasonable cost-based rates are then established by setting the revenue requirement and rates for each CCOSS class at the level produced by the CCOSS.

**Q. Why do you use the term “CCOSS class”?**

A. I use that term to distinguish between other terms used in this proceeding such as “Rate Class” and “Major Rate Class”. The CCOSS classes that SWEPCO use to determine costs are not the same as the “Major Rate Classes” that SWEPCO uses for revenue distribution purposes, and neither of those customer classifications are consistent with the “rate classes” that SWEPCO includes in its tariffs.

**Q. Does the TAC require for rates to be set at cost?**

A. Yes. 16 TAC § 25.234, relating to rate design, states:

(a) Rates shall not be unreasonably preferential, prejudicial, or discriminatory, but shall be sufficient, equitable, and consistent in application to each class of customers, and shall be based on cost.<sup>10</sup>

While 16 TAC § 25.234 requires that rates be set at cost, the Commission has found that rate moderation, or gradualism, was an appropriate exception to this requirement for certain vertically-integrated utilities not operating within the competitive ERCOT market where movement to cost would result in an increase that is “out of proportion or harsh to a particular class...”<sup>11</sup>

**Q. What is SWEPCO’s revenue distribution proposal?**

A. SWEPCO does not propose to set the revenue requirement for each class in its CCOSS at cost, but rather proposes a gradualism adjustment to moderate the impact of SWEPCO’s proposed rate change on some classes. SWEPCO’s gradualism proposal groups the rate classes into four different bundles which SWEPCO refers to as “Major Rate Classes.”<sup>12</sup>

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<sup>10</sup> See 16 TAC § 25.234(a) and (b).

<sup>11</sup> *Application of Entergy Texas, Inc. for Authority to Change Rates, Reconcile Fuel Costs, and Obtain Deferred Accounting Treatment*, Docket No. 39896, Proposal for Decision at 284 (Jul. 6, 2012).

<sup>12</sup> Direct Testimony of Jennifer L. Jackson at 11 (Oct 14, 2020) (Jackson Direct)

1 The four bundles are Residential, Commercial and Industrial, Municipal, and Lighting.  
2 SWEPCO then sets class revenue requirements for the classes within each “Major Rate  
3 Class” bundle such that each bundle is at cost, although the individual classes within the  
4 bundles may be significantly above or significantly below cost.

5 **Q. Does SWEPCO’s use of a different customer classification for revenue distribution**  
6 **purposes as compared to its CCOSS raise any concerns?**

7 A. Yes. As discussed above, the CCOSS reflecting the Commission’s decisions in this case  
8 is what establishes the just and reasonable cost-based revenue requirement *for each of the*  
9 *CCOSS classes*. By using a different customer classification for revenue distribution  
10 purposes, SWEPCO unnecessarily introduces the potential for arbitrary and unreasonable  
11 cost-shifting between classes into the rate-setting process. In order to establish just and  
12 reasonable cost-based rates, it is important to keep in mind the different customer  
13 classifications being used in this proceeding.

14 **Q. Does establishing a cost-based revenue requirement for a “Major Rate Class” bundle**  
15 **of CCOSS classes indicate that the individual CCOSS classes within that bundle are**  
16 **at a just and reasonable cost-based level?**

17 A. No. Where there are multiple CCOSS classes within a “Major Rate Class”, there are an  
18 infinite number of different CCOSS class revenue requirements consistent with the overall  
19 “Major Rate Class” revenue requirement being set at the level of cost for the “Major Rate  
20 Class”. For example, consider a hypothetical Major Rate Class that includes two different  
21 CCOSS study classes, A and B, where the CCOSS indicates a class cost of service amount  
22 of \$100 for Class A and \$900 for Class B, with the combined Major Rate Class cost of  
23 service amount summing to \$1000. The requirement to set just and reasonable cost-based

1 rates would require that the revenue requirement for Class A be set equal to the \$100  
2 CCOSS result for that class, and correspondingly that the revenue requirement for Class B  
3 be set equal to the \$900 CCOSS results for Class B. However, if the only consideration is  
4 that the Major Rate Class revenue requirement is set at \$1000, then one could set the  
5 revenue requirement for Class A at \$550 and the revenue requirement for Class B at \$450  
6 as well. Such an approach would establish revenues and rates for the “Major Rate Class”  
7 at the cost-based level, however the revenues and rates for Class A would be more than  
8 five-times the cost-based level (at \$550 instead of \$100), while the revenues and rates for  
9 Class B would be at half the level that cost-based rates would produce (at \$450 instead of  
10 \$900).

11 As this example shows, reliance upon the “Major Rate Class” customer  
12 classification for revenue distribution purposes does not adequately address the  
13 requirement in 16 TAC § 25.234 that rates be based on cost. A Major Rate Class might  
14 very well be set at cost while all of the rates within that Major Rate Class might be entirely  
15 arbitrary and unreasonable.

16 **Q. Is it your position that the Major Rate Class groupings should not be used in**  
17 **implementing a gradual movement to cost-based rates?**

18 A. No. The Major Rate Class groupings can still be used as part of a gradualist approach to  
19 implementing cost-based rates. However, establishing the revenue requirements and rates  
20 at cost for the Major Rate Class groupings does not necessarily indicate that reasonable  
21 movement towards cost-based rates is being made. Further movement towards cost-based  
22 rates is necessary at the CCOSS class level as well as at the Major Rate Class level.

**Q. Should SWEPCO's revenue distribution proposal be approved?**

A. No. SWEPCO's revenue distribution proposal should be rejected because it is inequitable, does not achieve a reasonable movement towards cost-based rates, and does not conform with Commission precedent as discussed below.

**A. Issues with SWEPCO's Revenue Distribution Proposal**

**Q. What aspects of SWEPCO's revenue distribution proposal do not conform with recent Commission precedent?**

A. First, SWEPCO's excludes DCRF and TCRF revenues when evaluating the magnitude of SWEPCO's proposed base rate increase. Second, the CCROSS class revenue requirements for the classes within the Municipal bundle and the classes within the Commercial and Industrial bundle are set such that each class experience the same gross percentage increase in base rates within each bundle, despite each class being significantly different with respect to distance from cost under current rates. Finally, rate increases for CCROSS classes within each bundle were capped at levels well below the level of rate caps recently approved by the Commission.

**1. Exclusion of DCRF and TCRF Revenues**

**Q. Has the Commission determined that TCRF and DCRF revenues should be accounted for when evaluating a base rate increase?**

A. Yes. In the most recent fully-litigated base rate case, Docket No. 46449, SWEPCO's previous rate case, the Commission determined that when evaluating the potential for a harsh rate increase that may warrant gradual movement to cost "a class's present revenues



1 should be evaluated inclusive of existing TCRF and DCRF revenues, which are base-rate  
2 related revenues.”<sup>13</sup>

3 **Q. Why should TCRF and DCRF revenues be included when evaluating the magnitude**  
4 **of SWEPCO’s base rate increase?**

5 A. The TCRF and DCRF mechanisms recover base-rate-related transmission costs and  
6 distribution costs incurred subsequent to the Test Year in SWEPCO’s last base rate case.  
7 In this proceeding, under SWEPCO’s proposal, the currently existing TCRF and DCRF  
8 rates will be set to zero, and the related costs are effectively “rolled into” base rates.<sup>14</sup>  
9 Consistent with Commission precedent on this issue, since we are concerned with whether  
10 full movement to cost-based rates would be “out of proportion or harsh” to a degree  
11 sufficient to warrant departure from the Commission’s requirements that rates be set at  
12 cost, we must look at the overall impact of the rate changes upon a customer’s bill.  
13 Focusing solely upon the increase in certain rates while ignoring the fact that the TCRF  
14 and DCRF rate will be going down to zero would give a misleading sense of whether the  
15 rate changes at issue are “out of proportion or harsh.” The proper evaluation of SWEPCO’s  
16 proposed rate increase should compare the proposed base rate revenues to the present base  
17 rate Test Year revenues including the TCRF and DCRF revenues because such an approach  
18 properly reflects the total base-rate-related revenues that customers are paying. For  
19 example, if customers were currently paying \$85 million in base rates and \$15 million in  
20 TCRF and DCRF rates, and the Company proposes \$105 million in base rates while zeroing

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<sup>13</sup> *Application of Southwestern Electric Power Company for Authority to Change Rates*, Docket No. 46449, Order on Rehearing at Finding of Fact 314 (Mar. 19, 2018).

<sup>14</sup> Jackson Direct at 8, 12.

1 out the TCRF and DCRF, the actual net increase in base-rate-related revenues that  
2 customers face is \$5 million, not the \$20 million gross increase in base rate revenues alone.

3 **Q. How does SWEPCO's decision to exclude DCRF and TCRF revenues affect the**  
4 **perception SWEPCO's increase in base rates?**

5 A. Although SWEPCO is proposing a 30.31% gross increase in base rates,<sup>15</sup> the actual net  
6 increase is 24.96% when one accounts for the elimination of the DCRF and TCRF rates  
7 that will occur as the cost recovery for those riders is moved into base rates.

8  
9 **2. Proposed Increase for Municipal and Commercial and Industrial**

10 **Q. How did SWEPCO set the class revenue requirements for the classes within the**  
11 **Municipal and Commercial and Industrial Major Rate Class bundles?**

12 A. For the CCOSS classes within each of these bundles, SWEPCO is choosing to ignore the  
13 results of its own CCOSS, and is asking the Commission to similarly ignore the results of  
14 the CCOSS reflecting the Commission's decisions in this proceeding. For two of the Major  
15 Rate Classes, the Company proposes that every CCOSS class within that bundle receive  
16 the overall percentage increase that the Major Rate Class would face. Specifically,  
17 SWEPCO proposes that the class revenue requirement increases for the twelve CCOSS  
18 classes within the Commercial and Industrial bundle are set such that each class has a target  
19 gross base-rate increase of 32.98%.<sup>16</sup> The class revenue requirements for the four CCOSS  
20 classes within the Municipal bundle would be set such that each CCOSS class has a target  
21 gross base-rate increase of 13.49%.<sup>17</sup>

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<sup>15</sup> Jackson Direct at Exhibit JLJ-1.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

1 **Q. Is SWEPCO's proposal to apply a single across-the-board percentage increase in base**  
2 **rates to all classes within the Commercial and Industrial bundle and a single across-**  
3 **the-board percentage increase to all classes within the Municipal bundle reasonable?**

4 A. No. As seen in Table 1 below, this proposal results in arbitrary relative rate increases to  
5 customers that conflict with SWEPCO's own CCOSS. Customers that would be receiving  
6 a substantially higher increase if moved to cost relative to another class within the bundle  
7 end up with the exact same percentage increase. Customers of CCOSS classes that should  
8 face a rate decrease under the cost-based rates mandated by 16 TAC § 25.234 end up with  
9 the exact same percentage increase as customers within the same bundle that would face  
10 an increase of over 200% under movement to cost-based rates. For example, SWEPCO's  
11 CCOSS shows that the Municipal Service Class should receive a decrease of 1.66% to  
12 arrive at SWEPCO's proposed cost-based rates for that class, yet SWEPCO's proposal  
13 results in a 13.49% increase for that class. Meanwhile, SWEPCO's CCOSS also shows that  
14 the Public Street and Highway Lighting class should receive an increase of 227.23% to  
15 arrive at SWEPCO's proposed cost level for that class. However, SWEPCO's revenue  
16 distribution proposal produces the same 13.49% increase for the Public Street and Highway  
17 Lighting class as for the Municipal Service class just because they were included within  
18 the same rate bundle. While any gradualist approach to revenue distribution will produce  
19 some deviations between cost-based increases and the gradualist-based increase,  
20 SWEPCO's proposal results in outcomes are clearly arbitrary, unjust, and unreasonable in  
21 that they completely ignore the results of the CCOSS and result in some rates for some  
22 CCOSS classes unjustifiably moving away from cost.

**Table 1**

Class	Cost-Based			Proposed	Proposed
	Present Base Revenue	Gross Base Revenue Change	Cost-Based Gross Base % Change	Gross Base Revenue	Gross Base % Change
<b>Commercial and Industrial</b>					
General Service w/Dem	16,998,369	3,886,913	22.87%	5,605,870	32.98%
General Service wo/Dem	5,669,225	2,247,226	39.64%	1,869,646	32.98%
Lighting & Power Sec	100,037,248	36,349,498	36.34%	32,991,155	32.98%
Lighting & Power Pri	23,827,679	3,971,269	16.67%	7,858,099	32.98%
Cotton Gin	265,617	244,080	91.89%	87,597	32.98%
Large lighting & Power Pri	5,298,104	1,590,320	30.02%	1,747,255	32.98%
Large lighting & Power Tran	22,387,847	9,147,516	40.86%	7,383,259	32.98%
Metal Melting Sec	143,749	53,205	37.01%	47,407	32.98%
Metal Melting Pri	1,402,858	526,501	37.53%	462,647	32.98%
Metal Melting Tran	1,498,929	81,464	5.43%	494,330	32.98%
Oilfield Pri	10,636,387	3,643,272	34.25%	3,507,760	32.98%
Oilfield Sec	588,848	507,957	86.26%	194,196	32.98%
<b>Municipal</b>					
Municipal Pumping	2,279,333	401,037	17.59%	307,396	13.49%
Municipal Service	1,650,219	-27,445	-1.66%	222,552	13.49%
Municipal Lighting	2,267,085	397,616	17.54%	305,744	13.49%
Public Street & Hwy	30,170	68,554	227.23%	4,069	13.49%

**Q. How were class revenue requirements determined in SWEPCO's last base rate change?**

**A.** As adopted by the Commission, revenue increases for any individual class, including changes in TCRF and DCRF revenues, were capped at roughly 43%. Then, the residual revenues from classes subject to the 42.6% cap were reallocated within the Major Rate Class bundle, excluding the capped classes.<sup>18</sup>

<sup>18</sup> *Application of Southwestern Electric Power Company for Authority to Change Rates*, Docket No. 46449, Commission Number Run at bates 13 (Memorandum of William Abbott) (Dec. 20, 2017).

**Q. How should class revenue requirements be determined in this proceeding?**

A. As I discuss below, starting from the results of the CCOSS reflecting the Commission's decisions on cost and allocation issues, revenue increases for any individual class, net of changes in TCRF and DCRF revenues, should be capped at 43%. Then, the residual revenues from classes subject to the 43% cap should be reallocated proportionally among the classes within the rate bundle that are not subject to the 43% cap. This approach would be consistent with the rate increase adopted by the Commission in SWEPCO's previous rate case and would result in class revenue requirements that will more closely reflect the results of the CCOSS approved in this case.

### **3. Proposed Increase Cap**

**Q What was the maximum net revenue increase approved by the Commission in SWEPCO's last base rate case, Docket No. 46449?**

A. Class revenue increases, net of changes in TCRF and DCRF revenues, were capped at a roughly 43% increase.

**Q What is the maximum net revenue increase proposed by SWEPCO in this case?**

A. SWEPCO proposes a gross increase of 32.98% for all classes within the Commercial and Industrial bundle, a gross increase of 13.49% for all classes within the Commercial and Industrial bundle, and a maximum gross increase of 37.76% for the Lighting bundle.<sup>19</sup> However, as seen in Table 2 below, after accounting for changes in TCRF and DCRF revenues, the actual maximum net revenue increases under SWEPCO's proposal are

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<sup>19</sup> Jackson Direct at Exhibit JLJ-1.

32.41% for the Commercial and Industrial bundle, 10.06% for the Municipal bundle, and  
24.55% for the Lighting bundle.

**Table 2**

<b>Class</b>	<b>Present Base + DCRF + TCRF Revenues</b>	<b>Target Base Revenue Change</b>	<b>Total Change</b>	<b>Total % Change</b>
Residential	153,227,969	188,152,651	34,924,682	22.79%
General Service w/Dem	17,638,468	22,604,240	4,965,772	28.15%
General Service wo/Dem	5,875,817	7,538,872	1,663,055	28.30%
Lighting & Power Sec	104,243,548	133,028,403	28,784,855	27.61%
Lighting & Power Pri	24,896,460	31,685,778	6,789,319	27.27%
Cotton Gin	283,787	353,214	69,427	24.46%
Large lighting & Power Pri	5,538,446	7,045,359	1,506,913	27.21%
Large lighting & Power Tran	23,470,723	29,771,107	6,300,384	26.84%
Metal Melting Sec	151,026	191,156	40,130	26.57%
Metal Melting Pri	1,496,310	1,865,505	369,194	24.67%
Metal Melting Tran	1,672,408	1,993,259	320,851	19.18%
Oilfield Pri	11,134,950	14,144,147	3,009,196	27.02%
Oilfield Sec	591,392	783,044	191,652	32.41%
Total Commercial and Industrial	196,993,335	251,004,083	54,010,748	27.42%
Municipal Pumping	2,390,468	2,586,729	196,261	8.21%
Municipal Service	1,701,604	1,872,771	171,167	10.06%
Municipal Lighting	2,351,444	2,572,829	221,385	9.41%
Public Street & Hwy	33,447	34,239	792	2.37%
Total Municipal	6,476,962	7,066,568	589,605	9.10%
Private, Outdoor, Area	4,307,444	4,902,574	595,130	13.82%
Customer-Owned Lighting	324,093	403,663	79,570	24.55%
Total Lighting	4,631,537	5,306,237	674,700	14.57%
Total Retail Firm	361,329,802	451,529,538	90,199,736	24.96%

**Q Do you agree with SWEPCO's approach?**

A. No. SWEPCO's approach results in lower revenue requirement increases for CCOSS classes that are substantially below cost and will render it more difficult to eventually arrive at cost-based rates in the future.

**Q. Why is it important for rates to be cost-based?**

A. In addition to being required by 16 TAC § 25.234, cost-based rates are equitable and essential in advancing economic efficiency and rate stability. When rates are set at cost, the revenues that a utility recovers through these rates reflect the costs that customers impose on a utility's system. Cost-based rates will more closely match the costs incurred as customer usage changes over time. When rates are set below cost, the revenues recovered through the below-cost rates will be insufficient to recover the cost to serve that group of customers. Furthermore, setting subsidized rates for some customers requires that the rates for other customers be set above cost. Consequently, maintaining a rate structure based on non-cost-based rates would provide price signals that no longer reflect the actual cost to serve each group of customers, thus promoting inefficient usage of the utility's system by encouraging usage of the utility system by those customers whose rates are below-cost while discouraging usage of the utility system by those customers whose rates are above-cost. Over time, this can lead to a growing gap between revenue recovery and costs. This is of particular concern in this proceeding considering that several classes in SWEPCO's CCOSS have moved farther away from cost since SWEPCO's last base rate case.<sup>20</sup>

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<sup>20</sup> Southwestern Electric Power Company's Response to Staff's Eighth Request for Information at Request No. Staff 8-1 (Jan 21, 2021).

1  
2 **Q. If the Commission were to approve the same one-step gradualism approach as done**  
3 **in SWEPCO's last base rate case, would this approach result in significant movement**  
4 **towards cost for all classes within SWEPCO's CCOSS?**

5 A. No. Certain classes, like the Cotton Gin, Oilfield Secondary Service, and the Public Street  
6 and Highway Lighting classes would still be significantly below cost whether the  
7 Commission approves SWEPCO's proposed rate increase or Staff's proposed rate increase.

8 **Q. Do you believe that additional steps are needed to move classes towards cost?**

9 A. Yes. As I explain in greater detail below. I recommend that the Commission adopts a multi-  
10 phased approach to achieve cost based rates within three or four years.

11  
12 **B. Staff's Gradualism Proposal**

13 **Q What is your gradualism proposal?**

14 A. I propose a multi-year phase-in mechanism that would allow for a gradual movement  
15 towards cost-based rates for all classes, based on the results of the CCOSS approved by the  
16 Commission in this proceeding.

17 **Q. How would your proposed phase-in gradualism proposal work?**

18 A. Phase One Rates would be set consistent with the Commission's approved revenue  
19 distribution methodology from Docket No. 46449 as discussed above, and would be  
20 implemented upon the conclusion of this proceeding. In other words, starting with the  
21 results of the CCOSS reflecting the Commission's decisions on cost and allocation issues,  
22 revenue increases for any individual class, net of changes in TCRF and DCRF revenues,  
23 would be capped at 43%. Then, the residual revenues from classes subject to the 43% cap



1       should be reallocated proportionally among the classes within the rate bundle that are not  
2       subject to the 43% cap. At Staff's proposed CCROSS level, the Cotton Gin, Oilfield  
3       Secondary Service, and the Public Street and Highway Lighting classes experience a net  
4       cost-based increase greater than 43%. Thus, under my proposal, the Cotton Gin and  
5       Oilfield Secondary Service would be capped at a 43% net increase, and the residual revenue  
6       amount would be allocated proportionally among the other classes within the Commercial  
7       and Industrial rate bundle. The Public Street and Highway Lighting class would also be  
8       capped at a 43% net increase and the residual revenue amount would be allocated  
9       proportionally among the other classes within the Municipal rate bundle.

10       Phase II rates would be set so as to cap revenue increases for any individual class,  
11       net of changes in TCRF and DCRF revenues, at an additional 43%. In other words, revenue  
12       increases for any individual class would be capped at 86% net increase from present test-  
13       year base-rate related revenues. At Staff's proposed CCROSS cost-based net revenue  
14       increases for all classes within the Commercial and Industrial rate bundle are below the  
15       86% cap. This means that rates for all classes within the Residential, Commercial and  
16       Industrial, and Lighting rate bundles would be set at cost during Phase II. At Staff's  
17       proposed CCROSS level, a cost-based net revenue increase for the Public Street and  
18       Highway Lighting class would still be well above the 86% cap. For this reason, The Public  
19       Street and Highway Lighting class would to be capped at an 86% net increase and the now  
20       lesser residual revenue amount would be allocated proportionally among the other classes  
21       within the Municipal rate bundle, resulting in a decrease in rates for the non-capped classes.  
22       Phase II rates would come into effect a year after Phase I rates come into effect.

1 Phase III rates would be set so as to cap revenue increases for any individual class,  
2 net of changes in TCRF and DCRF revenues, at an additional 43%. In other words, revenue  
3 increases for any individual class would be capped at 129% net increase from present test-  
4 year base-rate related revenues. At Staff's proposed CCROSS, a cost-based net revenue  
5 increase for the Public Street and Highway Lighting class would still be above the 129%  
6 cap. For this reason, The Public Street and Highway Lighting class would to be capped at  
7 a 129% net increase and the now lesser residual revenue amount would be allocated  
8 proportionally among the other classes within the Municipal rate bundle, reducing their  
9 rates. Phase III rates would come into effect two year after Phase I rates come into effect.

10 Phase IV rates would be set so as to cap revenue increases for any individual class,  
11 net of changes in TCRF and DCRF revenues, at an additional 43%. In other words, revenue  
12 increases for any individual class would be capped at 172% net increase from present test-  
13 year base-rate related revenues. At Staff's proposed CCROSS, the Public Street and  
14 Highway Lighting's cost-based net revenue increase is 170.45%, which is below the 172%  
15 cap. This means that all rates would be set at cost during Phase IV.

16 **Q. Has the Commission approved a phase-in gradualism approach before?**

17 A. While the Commission has not approved a phase-in gradualism approach for an electric  
18 utility recently, the Commission has previously approved a phase-in gradualism approach  
19 for water Utilities in Docket Nos. 47736 and 50200.<sup>21</sup>

20 **Q. Has a phase-in gradualism approach ever been proposed for an electric utility?**

21 A. No. Not to my knowledge.

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<sup>21</sup> *Application of SWWC Utilities Inc DBA Water Services, Inc for Authority to Change Rates*, Docket No. 47736, Final Order at 12-13, 17 (Oct. 16, 2019); *Application of Undine Texas, LLC and Undine Texas Environmental, LLC for Authority to Change Rates*, Docket No. 50200, Order at 22 (Nov. 5, 2020).

**Q. What is your recommendation?**

A. I recommend that the Commission reject SWEPCO's revenue distribution proposal and that the Commission approves a phase-in approach, as described above, in order to achieve a gradual move towards cost-based rates for each class in SWEPCO's class cost of service study. This approach reasonably recognizes that full movement to cost in one step would be harsh to particular customer classes, yet would recognize the results of the Commission determinations as regards the CCSS, and gradually move rates to the cost-based level required by 16 TAC § 25.234.

**VI. GENERAL SERVICE DEMAND REQUIREMENT**

**Q. Did SWEPCO propose changes to its General Service Tariff?**

A. Yes. Among several other changes to its General Service Tariff, SWEPCO proposes to remove a tariff provision that restricts availability to customers with a maximum demand that does not exceed 50 kW.

**Q. Do you support SWEPCO's proposal to remove the tariff provision that restricts availability to customers with a maximum demand that does not exceed 50 kW?**

A. No. SWEPCO's proposal should be rejected because it constitutes a significant change to the tariff that would allow for the migration of customers from the Lighting & Power Tariff to the General Service tariff.

**Q. Did SWEPCO admit that their proposed revision to the General Service tariff would result in migration of customers to the General Service tariff?**

A. Yes. In her direct testimony, Jennifer L. Jackson stated:

Q. WILL THE STRUCTURAL CHANGES TO THE GS RATE  
SCHEDULE CREATE MIGRATION OF CUSTOMERS TO THE

1 REVISED GS RATE SCHEDULE THAT WERE PREVIOUSLY NOT  
2 ELIGIBLE FOR THE GS RATE SCHEDULE?

3 A. Yes. Customers that have demand requirements that exceeded the previous  
4 GS 50 kW maximum would be eligible to take service under the revised GS  
5 rate if that rate is more economical.<sup>22</sup>

6 **Q. What issue arises with the migration of customers towards the General Service**  
7 **Tariff?**

8 A. As stated above 16 TAC § 25.234, relating to rate design, states that “[r]ates shall not be  
9 unreasonably preferential, prejudicial, or discriminatory, but shall be sufficient, equitable,  
10 and consistent in application to each class of customers, and shall be based on cost.”<sup>23</sup> If  
11 SWEPCO’s proposal results in a large volume of customers migrating to the General  
12 Service tariff, this would mean that the rates approved by the Commission in this case for  
13 the two classes within the General Service tariff would no longer be sufficient to recover  
14 the costs of providing service to the two classes within the General Service tariff. The Test  
15 Year cost of service for the two General Service classes are based on billing and usage data  
16 for the Test Year adjusted for known and measurable changes and does not account for  
17 future migration of customers towards the General Service classes. While it is normal to  
18 expect that the number of customers taking service under a specific tariff to vary somewhat  
19 from year to year, structural tariff changes specifically designed to encourage customer  
20 migration from tariffs that are less economical is a significant change that could drastically  
21 alter the cost of service of the two General Service classes. If other tariffs are “less  
22 economical” than the General Service tariff, this arguably reflects the cost of providing  
23 service to customers within this tariff.

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<sup>22</sup> Jackson Direct at 19.

<sup>23</sup> 16 TAC § 25.234(a).

1 **Q. Can the issue of customer migration to the General Service tariff be resolved by**  
2 **adjusting the billing determinates used to set rates for the General Service Tariff to**  
3 **account for future customer migration?**

4 A. No. Adjusting the billing determinates used to set rates for the General Service Tariff in  
5 order to account for future customer migration, as proposed by SWEPCO,<sup>24</sup> would violate  
6 16 TAC § 25.234(b) which requires that rates be “determined using revenues, billing and  
7 usage data for a historical Test Year adjusted for known and measurable changes . . . .”  
8 Any estimates regarding unknown future customer migration would not meet the “known  
9 and measurable” standard.

10 **Q. Does facilitating customer migration between customer classes raise any other**  
11 **concerns?**

12 A. Yes. SWEPCO is unusual among utilities regulated by the Commission in that the  
13 Company allows for many customers to choose to take service under a variety of rate  
14 schedules. SWEPCO then relies on this potential for customer migration to argue that rates  
15 should not be based on cost as required under 16 TAC § 25.234<sup>25</sup> Almost all the customers  
16 of other electric utilities regulated by the Commission, and a substantial number of  
17 SWEPCO’s own customers, are required to take service under a single base rate schedule.  
18 It is this inflexibility in customer classification that allows for a reasonable analysis of the  
19 costs to serve particular customers and allows the Commission to establish just and  
20 reasonable cost-based rates. SWEPCO’s policy of providing special treatment to some

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<sup>24</sup> Jackson Direct at 19.

<sup>25</sup> Southwestern Electric Power Company’s Response to Staff’s Fourteenth Request for Information at Request No. Staff 14-1 (Mar. 22, 2021).

customers by allowing them to choose to take service under multiple different rate schedules undermines the Commission's ability to establish just and reasonable rates.

**Q. What is your recommendation?**

A. I recommend that the Commission rejects SWEPCO's proposal to remove the current General Service rate schedule provision that restricts availability to customers with a maximum demand that does not exceed 50 kW. I also recommend that the Commission order SWEPCO to revise its tariff in its next major rate proceeding to eliminate the potential for customer migration between rate schedules or between any other customer classification that would result in the potential for customers with the same cost of service characteristics to face different rates, so that any particular customer is only eligible to receive service under a single set of base rates.

## **VII. CONCLUSION**

**Q. Are there any additional adjustments to SWEPCO's filed case that may be reasonable?**

A. Yes. The recommendations above are based on my review of SWEPCO's application and the recommended adjustments of other Staff witnesses provided to me as of this date. I do imply that additional adjustments to SWEPCO's filed case are not appropriate and should not be made.

**Q. If you do not address an issue or position in your testimony, should that be interpreted as Staff supporting SWEPCO's position on that issue?**

A. No. The fact that I do not address an issue in my testimony should not be construed as agreeing, endorsing, or consenting to any position taken by SWEPCO.

1   **Q.**     **Does this conclude your direct testimony?**

2   **A.**     Yes.

## **Adrian Narvaez Canto**

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### **REGULATORY EXPERIENCE**

Rate Analyst, Tariff and Rate Analysis Section

Public Utility Commission of Texas Rate Regulation Division

Employed: June 2015 to present.

Duties: Perform analysis of tariff filings, cost allocation, and rate design. Review tariffs of regulated utilities to determine compliance with Commission requirements. Analyze cost allocation studies and rate design issues for regulated electric and water utilities. Analyze policy issues associated with the regulation of the utility industry. Work on or lead teams in contested cases, reports, the development of market rules, and research concerning pricing and related issues. Prepare and present testimony as an expert witness on rate and related issues in docketed proceedings before the Commission and the State Office of Administrative Hearings.

### **EDUCATION:**

2014            The University of Texas at Austin, Austin, TX  
Bachelor of Arts in Economics and French

### **List of Testimony Filed at the Public Utility Commission of Texas:**

**Docket No. 45712** - *Application of Southwestern Electric Power Company for Approval of a Distribution Cost Recovery Factor*, May 4, 2016.

**Docket No. 45787** – *Application of AEP Texas Central Company for Approval of a Distribution Cost Recovery Factor*, May 23, 2016.

**Docket No. 45788** - *Application of AEP Texas North Company for Approval of a Distribution Cost Recovery Factor*, May 23, 2016.



**Docket No. 46357** - *Application of Entergy Texas for Approval to Amend its Transmission Cost Recovery Factor*, December 6, 2016.

**Docket No. 46449** - *Application of Southwestern Electric Power Company for Authority to Change Rates*, May 2, 2017.

**Docket No. 47235** - *Oncor Electric Delivery Company LLC's Application for 2018 Energy Efficiency Cost Recovery Factor*, July 20, 2017

**Docket No. 47527** - *Application of Southwestern Public Service Company for Authority to Change Rates*, Revenue Requirement Direct Testimony, May 2, 2018.

**Docket No. 47527** - *Application of Southwestern Public Service Company for Authority to Change Rates*, Cost Allocation and Rate Design Direct Testimony, May 2, 2018.

**Docket No. 47527** - *Application of Southwestern Public Service Company for Authority to Change Rates*, Cost Allocation and Rate Design Cross-Rebuttal testimony, May 22, 2018.

**Docket No. 48231** – *Application of Oncor Electric Delivery Company for a Distribution Cost Recovery Factor*, May 24, 2018.

**Docket No. 48401**- *Application of Texas-New Mexico Power Company for Authority to Change Rates*, Direct Testimony, August 20, 2018.

**Docket No. 48401**- *Application of Texas-New Mexico Power Company for Authority to Change Rates*, Cross-Rebuttal testimony, August 28, 2018.

**Docket No. 48325** - *Application of Oncor Electric Delivery Company LLC for Authority to Decrease Rates Based on the Tax Cuts and Jobs Act of 2017*, September 11, 2018.

**Docket No. 48325** - *Review of Rate Case Expenses Incurred by Southwestern Electric Power Company and Municipalities in Docket No. 46449*, December 14, 2018.

**Docket No. 49057** - *Application of Entergy Texas for Approval of Transmission Cost Recovery Factor*, March 25, 2019.

**Docket No. 49427** – *Application of Oncor Electric Delivery Company to Amend its Distribution Cost Recovery Factor*, May 30, 2019.

**Docket No. 49494** - *Application of AEP Texas Inc. for Authority to Change Rates*, Direct Testimony, August 1, 2019.

**Docket No. 49494** - *Application of AEP Texas Inc. for Authority to Change Rates*, Cross-Rebuttal Testimony, August 13, 2019.

**Docket No. 50200** - *Application of Undine Texas, LLC and Undine Environmental, LLC for Authority to Change Rates*, June 10, 2020.

**Docket No. 49923** - *Application of Corix Utilities (Texas) Inc. to Implement Federal Tax Reduction Credit Riders*, July 31, 2020.

**Docket No. 50944** - *Application of Monarch Utilities I, L.P. for Authority to Change Rates, October 27, 2020.*

**Docket No. 51100** - *Application of the City of Lubbock, by and Through Lubbock Power & Light, for Authority to Establish Initial Wholesale Transmission Rates and Tariffs, November 12, 2020.*

**Docket No. 51611** - *Application of Sharyland Utilities, L.L.C. for Authority to Change Rates, Direct Testimony, March 12, 2021.*

**Docket No. 51611** - *Application of Sharyland Utilities, L.L.C. for Authority to Change Rates, Supplemental Testimony, March 24, 2021.*

DESCRIPTION	TOTAL COMPANY			TEXAS RETAIL		
	TOTAL COMPANY REQUESTED AMOUNT	STAFF ADJUSTMENT	STAFF ADJUSTED TOTAL COMPANY	COMPANY REQUESTED TEXAS RETAIL	STAFF'S REDUCTION TO TEXAS RETAIL	STAFF ADJUSTED TEXAS RETAIL
SUMMARY - EQUALIZED RETURN						
RATE BASE	5,389,281,030	(510,432,740)	4,878,848,290	2,025,542,720	(193,028,390)	1,832,514,330
RETURN	389,318,076	(66,328,294)	322,989,783	146,323,859	(25,007,644)	121,316,214
RATE OF RETURN ON RATE BASE	7.22%	-0.60%	6.62%	7.22%		6.62%
PRESENT O&M EXP	552,175,659	(23,683,317)	528,492,342	215,193,067	(8,805,673)	206,387,394
INCR IN 903-CUST ACCT & COLL FACTC	1,190,699		1,190,699	548,442	0	548,442
TOT OPERATION & MAINT EXP	553,366,358	(23,683,317)	529,683,041	215,741,509	(8,805,673)	206,935,836
DOLET HILLS RECOVERY	0	11,573,440	11,573,440	0	4,273,868	4,273,868
DEPRECIATION & AMORTIZATION EXP	275,368,632	(9,562,660)	265,805,972	105,928,834	(1,451,812)	104,477,022
SO2 ALLOWANCE	4	0	4	1	0	1
NON-REVENUE TAXES OTHER THAN INC	74,564,702	(4,299,252)	70,265,450	28,266,008	(1,607,010)	26,658,998
REVENUE RELATED TAXES ARK	0	0	0	0	0	0
REVENUE RELATED TAXES LA	9,515,593	0	9,515,593	0	0	0
REVENUE RELATED TAXES TX	10,821,602	(2,714,693)	8,106,909	10,821,602	(979,953)	9,841,649
TOTAL TAXES OTHER THAN INCOME	94,901,897	(7,013,945)	87,887,953	39,087,610	(2,586,963)	36,500,648
REV RELATED TAX ON REVENUE DEFICIENCY	5,389,633		5,389,633	2,482,493	0	2,482,493
FED INCOME TAX LIABILITY	65,445,545	(20,037,473)	45,408,072	24,601,826	(7,573,340)	17,028,487
TOTAL OPERATING EXPENSES	994,472,070	(48,723,955)	945,748,115	387,842,273	(16,143,919)	371,698,354
COST OF SERVICE	1,383,790,146	(115,052,249)	1,268,737,897	534,166,132	(41,151,563)	493,014,569
TOTAL PROPOSED CEEDITS	(195,477,466)	0	(195,477,466)	(82,636,594)	106	(82,636,488)
<b>BASE REVENUE REQUIREMENT</b>	<b>1,188,312,680</b>	<b>(115,052,249)</b>	<b>1,073,260,431</b>	<b>451,529,538</b>	<b>(41,151,458)</b>	<b>410,378,081</b>

## Class-Functional Cost of Service Summary

Attachment AN-3

	Generation Energy	Total Capacity				Total Capacity	Distribution Customer	Total Rate Base Revenue Requirement
		Generation Demand	Transmission Demand	Distribution Primary	Distribution Secondary			
1 Basic Residential	10,311,656	73,401,915	33,621,981	22,849,020	17,860,853	147,733,769	13,229,384	171,274,810
2								
3 General Service with Demand	994,991	7,787,760	3,587,006	3,045,928	2,382,203	16,802,896	1,255,430	19,053,318
4 General Service without Demand	319,772	2,501,092	1,153,049	1,201,954	940,631	5,796,725	1,115,721	7,232,217
5								
6 Cotton Gin	24,088	70,726	29,724	192,828	151,171	444,450	2,072	470,609
7								
8 Lighting and Power-Secondary	10,172,123	55,374,905	24,790,976	17,715,747	13,843,718	111,725,346	1,977,592	123,875,060
9 Lighting and Power-Primary	2,951,025	11,654,589	5,025,052	3,932,474	1,255,282	21,867,397	361,901	25,180,324
10								
11 Large Lighting and Power-Primary	738,037	3,427,431	1,506,969	239,100	130,530	5,304,030	160,023	6,202,089
12 Large Lighting and Power-Transmission	3,384,312	11,960,586	12,780,798	1,519	1,015	24,743,917	290,263	28,418,492
13								
14 Oilfield Primary	1,663,470	5,635,488	2,373,682	2,295,199	716,384	11,020,753	253,907	12,938,130
15 Oilfield Secondary	90,735	440,675	195,027	148,049	115,946	899,697	3,720	994,153
16								
17 Metal Melting-Primary	172,551	571,557	239,334	530,703	166,551	1,508,145	79,662	1,760,358
18 Metal Melting-Transmission	239,359	787,465	330,290	8,889	5,847	1,132,491	43,138	1,414,988
19 Metal Melting-Secondary	9,520	31,575	13,168	70,250	55,044	170,037	2,551	182,108
20								
21 Municipal Pumping	274,948	922,994	388,017	438,336	342,932	2,092,278	74,417	2,441,643
22 Municipal Service	127,863	552,203	240,767	219,259	171,235	1,183,464	170,112	1,481,439
23								
24 Municipal Lighting	128,680	419,049	174,584	339,324	265,062	1,198,018	1,123,932	2,450,631
25 Public Street and Highway	4,984	16,743	6,976	13,485	10,555	47,759	37,714	90,456
26								
27 Private, Outdoor, Area	238,518	784,645	327,629	639,594	500,028	2,251,896	2,033,075	4,523,490
28 Customer-Owned Lighting	31,457	128,304	43,769	91,990	72,005	336,067	26,240	393,765
29								
35 Total	31,878,088	176,469,702	86,828,798	53,973,646	38,986,991	356,259,137	22,240,855	410,378,080

DESCRIPTION	RESIDENTIAL BASIC	RESIDENTIAL DG	GS W/ DEMAND	GS WO/ DEMAND	COTTON GIN	GS DG	LIGHT & POWER SEC	LIGHT & POWER PRI	LIGHT & POWER DG	LLP PRI
SUMMARY - EQUALIZED RETURN										
RATE BASE	752,785,203	607,336	84,349,124	30,826,263	1,920,549	50,849	555,156,144	111,868,327	698,515	28,239,905
RETURN	49,835,927	40,207	5,584,085	2,040,762	127,144	3,366	36,752,478	7,405,913	46,243	1,869,540
RATE OF RETURN ON RATE BASE	0	0	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%
PRESENT O&M EXP	84,943,415	68,897	9,337,074	3,686,623	201,979	5,498	59,670,190	12,416,141	162,596	3,098,580
INCR IN 903-CUST ACCT & COLL FACTC	211,729	308	19,811	11,698	1,285	1,275	187,421	19,346	899	7,403
TOT OPERATION & MAINT EXP	85,155,144	69,205	9,356,885	3,698,321	203,264	6,773	59,857,611	12,435,487	163,495	3,105,983
DOLET HILLS RECOVERY	1,776,752	1,023	187,999	60,520	1,694	101	1,336,186	282,054	1,169	82,240
DEPRECIATION & AMORTIZATION EXP	43,355,579	36,854	4,895,598	1,791,374	118,225	3,038	31,665,124	6,398,406	39,287	1,552,106
SO2 ALLOWANCE	1	0	0	0	0	0	0	0	0	0
NON-REVENUE TAXES OTHER THAN INC	11,098,513	9,109	1,247,806	466,150	28,843	759	8,026,512	1,608,551	11,517	400,524
REVENUE RELATED TAXES ARK	0	0	0	0	0	0	0	0	0	0
REVENUE RELATED TAXES LA	0	0	0	0	0	0	0	0	0	0
REVENUE RELATED TAXES TX	4,111,448	2,995	467,968	146,199	5,877	397	3,478,818	686,326	4,595	268,908
TOTAL TAXES OTHER THAN INCOME	15,209,962	12,104	1,715,774	612,350	34,720	1,156	11,505,330	2,294,877	16,112	669,431
REV RELATED TAX ON REVENUE DEFICIENCY	958,380	1,394	89,675	52,949	5,815	5,769	848,350	87,569	4,070	33,509
FED INCOME TAX LIABILITY	7,136,822	5,686	808,234	298,678	18,181	487	5,130,856	987,212	6,655	251,252
TOTAL OPERATING EXPENSES	153,592,638	126,266	17,054,165	6,514,191	381,899	17,324	110,343,458	22,485,605	230,789	5,694,522
COST OF SERVICE	203,428,566	166,473	22,638,250	8,554,953	509,043	20,690	147,095,936	29,891,518	277,032	7,564,062
TOTAL PROPOSED CREDITS	(32,301,362)	(18,867)	(3,603,705)	(1,322,736)	(38,434)	(1,918)	(23,476,127)	(4,711,194)	(21,780)	(1,361,973)
<b>BASE REVENUE REQUIREMENT</b>	<b>171,127,203</b>	<b>147,607</b>	<b>19,034,546</b>	<b>7,232,217</b>	<b>470,609</b>	<b>18,772</b>	<b>123,619,808</b>	<b>25,180,324</b>	<b>255,252</b>	<b>6,202,089</b>

LLP TRAN	OILFIELD PRI	METAL MELTING PRI	METAL MELTING TRANS	METAL MELTING SEC	OILFIELD SEC	PUMPING SERVICE	MUNICIPAL SERVICE	MUNICIPAL LIGHTING	PUBLIC HIGHWAY	PRIVATE AREA LIGHTING	CUST-OWNED LIGHTING	TOTAL
141,812,017	57,042,435	7,243,621	6,084,999	728,185	4,568,274	10,460,099	6,293,881	10,831,687	394,572	19,048,041	1,504,304	1,832,514,330
9,388,247	3,776,326	479,543	402,839	48,207	302,429	692,480	416,668	717,080	26,122	1,261,019	99,588	121,316,214
6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%
19,368,780	6,441,529	824,600	737,580	79,287	488,677	1,187,211	738,669	905,229	35,428	1,815,531	173,880	206,387,394
49,414	18,806	2,739	139	302	2,649	2,080	(172)	2,055	378	3,999	4,879	548,442
19,418,194	6,460,335	827,340	737,718	79,588	491,326	1,189,292	738,497	907,284	35,805	1,819,530	178,759	206,935,836
296,179	137,728	13,493	18,763	736	10,889	22,278	13,193	9,651	397	18,334	2,488	4,273,868
7,310,293	3,253,527	426,167	337,745	45,877	255,890	611,024	370,548	682,008	23,655	1,215,100	89,597	104,477,022
0	0	0	0	0	0	0	0	0	0	0	0	1
1,935,837	826,410	106,512	86,012	11,136	65,576	152,223	93,023	163,041	5,941	292,658	22,344	26,658,998
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
18,522	196,464	66,041	75,319	4,202	2,560	59,657	48,944	73,555	1,506	111,193	10,155	9,841,649
1,954,359	1,022,874	172,552	161,331	15,338	68,136	211,879	141,968	236,596	7,447	403,851	32,499	36,500,648
223,669	85,123	12,399	627	1,365	11,990	9,417	(779)	9,303	1,709	18,103	22,085	2,482,492
1,267,728	493,557	65,092	50,169	6,874	41,571	92,397	57,969	105,972	3,824	185,546	13,726	17,028,487
30,470,423	11,453,144	1,517,042	1,306,354	149,779	879,803	2,136,288	1,321,395	1,950,814	72,838	3,660,463	339,155	371,698,354
39,858,670	15,229,470	1,996,585	1,709,193	197,987	1,182,232	2,828,768	1,738,063	2,667,894	98,959	4,921,482	438,743	493,014,568
(11,440,177)	(2,291,340)	(236,227)	(294,206)	(15,879)	(188,079)	(387,125)	(256,624)	(217,263)	(8,503)	(397,992)	(44,978)	(82,636,488)
28,418,492	12,938,130	1,760,358	1,414,988	182,108	994,153	2,441,643	1,481,439	2,450,631	90,456	4,523,490	393,765	410,378,080

DESCRIPTION	TCRF BASELINE	RESIDENTIAL BASIC	RESIDENTIAL DG	GS W/ DEMAND	GS WO/ DEMAND	COTTON GIN	GS DG	LIGHT & POWER SEC	LIGHT & POWER PRI	LIGHT & POWER DG	LLP PRI
TIC	521,436,894	201,633,788	106,975	21,504,769	6,921,362	152,078	11,125	148,386,599	30,136,458	126,413	8,982,860
ROR	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%
RTIC	34,520,194	13,348,571	7,082	1,423,660	458,208	10,068	737	9,823,498	1,995,095	8,369	594,684
TDEPR	20,977,593	8,111,800	4,304	865,145	278,449	6,118	448	5,969,646	1,212,401	5,086	361,384
TFIT	5,328,274	2,059,957	1,093	219,941	70,790	1,300	114	1,517,712	308,258	1,293	91,880
TOT	6,871,583	2,657,029	1,410	283,395	91,211	1,989	147	1,955,441	397,131	1,666	118,375
TCRED	(75,666,738)	(29,265,311)	(15,526)	(3,118,283)	(1,003,627)	(25,597)	(1,613)	(21,516,685)	(4,369,914)	(18,330)	(1,302,553)
revreqt	(7,984,180)	(3,087,954)	(1,638)	(329,082)	(105,914)	(2,597)	(170)	(2,270,669)	(461,149)	(1,935)	(137,458)
ATC	72,000,973	27,823,863	14,750	2,967,680	955,153	20,968	1,535	20,471,805	4,156,142	17,436	1,239,101
ALLOC		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
ClassALLOC		38.64%	0.02%	4.12%	1.33%	0.03%	0.00%	28.43%	5.77%	0.02%	1.72%
RR	64,016,792	24,735,909	13,112	2,638,599	849,239	18,371	1,365	18,201,136	3,694,994	15,501	1,101,643
BD		2,163,595,580	2,013,476	205,483,534	66,333,658	5,234,123	114,497	6,522,773	1,370,803	8,452	358,160
BD BASIS		kWh	kWh	kWh	kWh	kWh	kWh	kW	kW	kW	kW



LLP TRAN	OILFIELD PRI	METAL MELTING PRI	METAL MELTING TRANS	METAL MELTING SEC	OILFIELD SEC	PUMPING SERVICE	MUNICIPAL SERVICE	MUNICIPAL LIGHTING	PUBLIC HIGHWAY	PRIVATE AREA LIGHTING	CUST-OWNED LIGHTING	TOTAL
77,704,561	14,349,201	1,405,809	1,954,779	76,708	1,010,782	2,334,395	1,437,781	1,011,293	21,867	1,908,292	258,999	521,436,894
6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%
5,144,202	949,947	93,067	129,410	5,078	66,916	154,542	95,184	66,950	1,448	126,333	17,146	34,520,194
3,126,082	577,273	56,556	78,641	3,086	40,664	93,914	57,842	40,685	880	76,771	10,420	20,977,593
793,988	146,781	14,380	19,995	785	8,499	24,041	14,806	10,416	99	19,500	2,647	5,328,274
1,024,300	189,088	18,525	25,759	1,011	13,214	30,771	18,953	13,331	281	25,145	3,413	6,871,583
(11,267,490)	(2,080,695)	(203,848)	(283,451)	(11,123)	(172,460)	(336,565)	(207,294)	(145,805)	(6,003)	(276,971)	(37,591)	(75,666,738)
(1,189,539)	(219,567)	(21,512)	(29,912)	(1,174)	(17,413)	(35,549)	(21,895)	(15,399)	(467)	(29,222)	(3,966)	(7,984,180)
10,779,349	1,978,408	193,827	269,517	10,576	139,428	321,857	198,313	139,433	3,015	263,107	35,710	72,000,973
100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
14.98%	2.75%	0.27%	0.37%	0.01%	0.19%	0.45%	0.28%	0.19%	0.00%	0.37%	0.05%	100%
<b>9,589,810</b>	<b>1,758,841</b>	<b>172,315</b>	<b>239,605</b>	<b>9,402</b>	<b>122,015</b>	<b>286,308</b>	<b>176,418</b>	<b>124,034</b>	<b>2,548</b>	<b>233,886</b>	<b>31,744</b>	<b>64,016,792</b>
1,433,918	765,088	194,231	220,660	24,392	40,837	60,026,735	26,943,781	26,004,489	1,070,584	49,398,122	6,704,408	
kW	kW	kW	kW	kW	kW	kWh	kWh	kWh	kWh	kWh	kWh	



DESCRIPTION	DCRF BASELINE	RESIDENTIAL BASIC	RESIDENTIAL DG	GS W/ DEMAND	GS WO/ DEMAND	COTTON GIN	GS DG	LIGHT & POWER SEC	LIGHT & POWER PRI	LIGHT & POWER DG	LLP PRI
DIC <sub>RC</sub>	411,749,875	181,873,656	282,794	23,720,129	10,944,503	1,438,112	19,381	126,118,841	21,294,373	267,589	1,606,566
ROR <sub>AT</sub>	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%
DEPR <sub>RC</sub>	24,688,044	10,884,207	16,961	1,422,504	654,672	71,322	1,164	7,579,820	1,277,857	15,925	96,328
FIT <sub>RC</sub>	4,089,228	1,804,310	2,814	235,609	108,411	12,481	193	1,257,069	212,360	2,600	15,895
OT <sub>RC</sub>	5,758,980	2,544,535	3,960	332,303	153,222	16,580	272	1,768,405	298,647	3,727	22,482
ALLOC <sub>CLASS</sub>		44.16%	0.07%	5.76%	2.66%	0.33%	0.00%	30.66%	5.18%	0.06%	0.39%
DISTREV <sub>RC</sub>	61,794,940	27,273,462	42,457	3,560,737	1,640,855	195,589	2,912	18,954,620	3,198,595	39,967	241,063
BD <sub>RC-CLASS</sub>		2,163,595,580	2,013,476	205,483,534	66,333,658	5,234,123	114,497	6,522,773	1,370,803	8,452	358,160
BD <sub>RC-CLASS</sub> BASIS		kWh	kWh	kWh	kWh	kWh	kWh	kW	kW	kW	kW

LLP TRAN	OILFIELD PRI	METAL MELTING PRI	METAL MELTING TRANS	METAL MELTING SEC	OILFIELD SEC	PUMPING SERVICE	MUNICIPAL SERVICE	MUNICIPAL LIGHTING	PUBLIC HIGHWAY	PRIVATE AREA LIGHTING	CUST- OWNED LIGHTING	TOTAL
90,196	12,760,263	2,871,891	15,445	500,928	1,116,802	3,253,353	1,957,252	7,719,813	306,610	12,896,533	694,846	411,749,875
6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%
4,982	765,195	172,296	869	30,123	54,436	196,936	117,981	469,513	8,477	804,782	41,694	24,688,044
710	127,126	28,623	128	4,997	9,568	32,603	19,533	77,445	1,661	128,178	6,916	4,089,228
1,194	178,914	40,271	207	7,025	12,653	45,973	27,630	109,099	1,949	180,204	9,729	5,758,980
0.02%	3.10%	0.70%	0.00%	0.12%	0.26%	0.79%	0.48%	1.88%	0.06%	3.12%	0.17%	100.00%
12,857	1,915,991	431,314	2,227	75,307	150,591	490,889	294,718	1,167,124	32,385	1,966,941	104,339	61,794,940
1,433,918	765,088	194,231	220,660	24,392	40,837	60,026,735	26,943,781	26,004,489	1,070,584	49,398,122	6,704,408	
kW	kW	kW	kW	kW	kW	kWh	kWh	kWh	kWh	kWh	kWh	

Staff's Revenue Distribution

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Class	Revenue Distribution Phase I										
	Present Base Revenue	TCRF + DCRF Revenue	Present Base + TCRF + DCRF Revenue	Cost-Based Electric Revenue	Cost-Based Total Bill Change	Cost-Based % Change	Target Net Total Bill Change	Target Net % Change	Phase I Revenue Requirement	Phase I Gross Revenue Change	Phase I Gross % Change
<b>Residential</b>	<b>147,077,995</b>	<b>6,149,974</b>	<b>153,227,969</b>	<b>171,274,810</b>	<b>18,046,841</b>	<b>11.78%</b>	<b>18,046,841</b>	<b>11.78%</b>	<b>171,274,810</b>	<b>24,196,815</b>	<b>16.45%</b>
General Service w/ Demand	16,998,369	640,098	17,638,468	19,053,318	1,414,851	8.02%	1,432,809	8.12%	19,071,277	2,072,907	12.19%
General Service w/o Demand	5,669,225	206,592	5,875,817	7,232,217	1,356,400	23.08%	1,363,217	23.20%	7,239,034	1,569,809	27.69%
Lighting & Power Sec	100,037,248	4,206,300	104,243,548	123,875,060	19,631,513	18.83%	19,748,270	18.94%	123,991,818	23,954,570	23.95%
Lighting & Power Pri	23,827,679	1,068,781	24,896,460	25,180,324	283,864	1.14%	307,598	1.24%	25,204,058	1,376,379	5.78%
Cotton Gin	265,617	18,170	283,787	470,609	186,822	65.83%	122,028	43.00%	405,816	140,199	52.78%
Large Lighting & Power Pri	5,298,104	240,342	5,538,446	6,202,089	663,643	11.98%	669,489	12.09%	6,207,935	909,831	17.17%
Large Lighting & Power Tran	22,387,847	1,082,875	23,470,723	28,418,492	4,947,770	21.08%	4,974,555	21.19%	28,445,278	6,057,431	27.06%
Metal Melting-Sec	143,749	7,277	151,026	182,108	31,082	20.58%	31,253	20.69%	182,279	38,530	26.80%
Metal Melting-Pri	1,402,858	93,452	1,496,310	1,760,358	264,047	17.65%	265,707	17.76%	1,762,017	359,159	25.60%
Metal Melting-Tran	1,498,929	173,479	1,672,408	1,414,988	(257,421)	-15.39%	(256,087)	-15.31%	1,416,321	(82,608)	-5.51%
Oilfield Pri	10,636,387	498,564	11,134,950	12,938,130	1,803,180	16.19%	1,815,374	16.30%	12,950,325	2,313,938	21.75%
Oilfield Sec	588,848	2,543	591,392	994,153	402,761	68.10%	254,298	43.00%	845,690	256,841	43.62%
<b>Total Commercial &amp; Industrial</b>	<b>188,754,861</b>	<b>8,238,473</b>	<b>196,993,335</b>	<b>227,721,847</b>	<b>30,728,513</b>	<b>15.60%</b>	<b>30,728,513</b>	<b>15.60%</b>	<b>227,721,847</b>	<b>38,966,986</b>	<b>20.64%</b>
Municipal Pumping	2,279,333	111,135	2,390,468	2,441,643	51,176	2.14%	67,505	2.82%	2,457,973	178,641	7.84%
Municipal Service	1,650,219	51,385	1,701,604	1,481,439	(220,165)	-12.94%	(210,257)	-12.36%	1,491,347	(158,872)	-9.63%
Municipal Lighting	2,267,085	84,359	2,351,444	2,450,631	99,187	4.22%	115,577	4.92%	2,467,021	199,936	8.82%
Public Street & Hwy Lighting	30,170	3,277	33,447	90,456	57,010	170.45%	14,382	43.00%	47,829	17,659	58.53%
<b>Total Muni &amp; Muni Lighting</b>	<b>6,226,806</b>	<b>250,156</b>	<b>6,476,962</b>	<b>6,464,169</b>	<b>(12,793)</b>	<b>-0.20%</b>	<b>(12,793)</b>	<b>-0.20%</b>	<b>6,464,169</b>	<b>237,363</b>	<b>3.81%</b>
Private, Outdoor, Area Lighting	4,150,616	156,828	4,307,444	4,523,490	216,046	5.02%	216,046	5.02%	4,523,490	372,873	8.98%
Customer-Owned Lighting	293,022	31,071	324,093	393,765	69,672	21.50%	69,672	21.50%	393,765	100,742	34.38%
<b>Total Lighting</b>	<b>4,443,639</b>	<b>187,898</b>	<b>4,631,537</b>	<b>4,917,254</b>	<b>285,717</b>	<b>6.17%</b>	<b>285,717</b>	<b>6.17%</b>	<b>4,917,254</b>	<b>473,616</b>	<b>10.66%</b>
<b>Total Firm Retail</b>	<b>346,503,301</b>	<b>14,826,502</b>	<b>361,329,802</b>	<b>410,378,080</b>	<b>49,048,278</b>	<b>13.57%</b>	<b>49,048,278</b>	<b>13.57%</b>	<b>410,378,080</b>	<b>63,874,780</b>	<b>18.43%</b>

Staff's Revenue Distribution

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Class	Revenue Distribution Phase II										
	Present Base Revenue	TCRF + DCRF Revenue	Present Base + TCRF + DCRF Revenue	Cost-Based Electric Revenue	Cost-Based Total Bill Change	Cost- Based % Change	Target Net Total Bill Change	Target Net % Change	Phase I Revenue Requirement	Phase I Gross Revenue Change	Phase I Gross % Change
<b>Residential</b>	<b>147,077,995</b>	<b>6,149,974</b>	<b>153,227,969</b>	<b>171,274,810</b>	<b>18,046,841</b>	<b>11.78%</b>	<b>18,046,841</b>	<b>11.78%</b>	<b>171,274,810</b>	<b>24,196,815</b>	<b>16.45%</b>
General Service w/ Demand	16,998,369	640,098	17,638,468	19,053,318	1,414,851	8.02%	1,414,851	8.02%	19,053,318	2,054,949	12.09%
General Service w/o Demand	5,669,225	206,592	5,875,817	7,232,217	1,356,400	23.08%	1,356,400	23.08%	7,232,217	1,562,992	27.57%
Lighting & Power Sec	100,037,248	4,206,300	104,243,548	123,875,060	19,631,513	18.83%	19,631,513	18.83%	123,875,060	23,837,812	23.83%
Lighting & Power Pri	23,827,679	1,068,781	24,896,460	25,180,324	283,864	1.14%	283,864	1.14%	25,180,324	1,352,645	5.68%
Cotton Gin	265,617	18,170	283,787	470,609	186,822	65.83%	186,822	65.83%	470,609	204,993	77.18%
Large Lighting & Power Pri	5,298,104	240,342	5,538,446	6,202,089	663,643	11.98%	663,643	11.98%	6,202,089	903,985	17.06%
Large Lighting & Power Tran	22,387,847	1,082,875	23,470,723	28,418,492	4,947,770	21.08%	4,947,770	21.08%	28,418,492	6,030,645	26.94%
Metal Melting-Sec	143,749	7,277	151,026	182,108	31,082	20.58%	31,082	20.58%	182,108	38,358	26.68%
Metal Melting-Pri	1,402,858	93,452	1,496,310	1,760,358	264,047	17.65%	264,047	17.65%	1,760,358	357,500	25.48%
Metal Melting-Tran	1,498,929	173,479	1,672,408	1,414,988	(257,421)	-15.39%	(257,421)	-15.39%	1,414,988	(83,941)	-5.60%
Oilfield Pri	10,636,387	498,564	11,134,950	12,938,130	1,803,180	16.19%	1,803,180	16.19%	12,938,130	2,301,743	21.64%
Oilfield Sec	588,848	2,543	591,392	994,153	402,761	68.10%	402,761	68.10%	994,153	405,305	68.83%
<b>Total Commercial &amp; Industrial</b>	<b>188,754,861</b>	<b>8,238,473</b>	<b>196,993,335</b>	<b>227,721,847</b>	<b>30,728,513</b>	<b>15.60%</b>	<b>30,728,513</b>	<b>15.60%</b>	<b>227,721,847</b>	<b>38,966,986</b>	<b>20.64%</b>
Municipal Pumping	2,279,333	111,135	2,390,468	2,441,643	51,176	2.14%	61,996	2.59%	2,452,464	173,131	7.60%
Municipal Service	1,650,219	51,385	1,701,604	1,481,439	(220,165)	-12.94%	(213,600)	-12.55%	1,488,004	(162,215)	-9.83%
Municipal Lighting	2,267,085	84,359	2,351,444	2,450,631	99,187	4.22%	110,047	4.68%	2,461,491	194,406	8.58%
Public Street & Hwy Lighting	30,170	3,277	33,447	90,456	57,010	170.45%	28,764	86.00%	62,211	32,041	106.20%
<b>Total Muni &amp; Muni Lighting</b>	<b>6,226,806</b>	<b>250,156</b>	<b>6,476,962</b>	<b>6,464,169</b>	<b>(12,793)</b>	<b>-0.20%</b>	<b>(12,793)</b>	<b>-0.20%</b>	<b>6,464,169</b>	<b>237,363</b>	<b>3.81%</b>
Private, Outdoor, Area Lighting	4,150,616	156,828	4,307,444	4,523,490	216,046	5.02%	216,046	5.02%	4,523,490	372,873	8.98%
Customer-Owned Lighting	293,022	31,071	324,093	393,765	69,672	21.50%	69,672	21.50%	393,765	100,742	34.38%
<b>Total Lighting</b>	<b>4,443,639</b>	<b>187,898</b>	<b>4,631,537</b>	<b>4,917,254</b>	<b>285,717</b>	<b>6.17%</b>	<b>285,717</b>	<b>6.17%</b>	<b>4,917,254</b>	<b>473,616</b>	<b>10.66%</b>
<b>Total Firm Retail</b>	<b>346,503,301</b>	<b>14,826,502</b>	<b>361,329,802</b>	<b>410,378,080</b>	<b>49,048,278</b>	<b>13.57%</b>	<b>49,048,278</b>	<b>13.57%</b>	<b>410,378,080</b>	<b>63,874,780</b>	<b>18.43%</b>

Staff's Revenue Distribution

Attachment AN-6

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Class	Revenue Distribution Phase III										
	Present Base Revenue	TCRF + DCRF Revenue	Present Base + TCRF + DCRF Revenue	Cost-Based Electric Revenue	Cost-Based Total Bill Change	Cost- Based % Change	Target Net Total Bill Change	Target Net % Change	Phase I Revenue Requirement	Phase I Gross Revenue Change	Phase I Gross % Change
<b>Residential</b>	<b>147,077,995</b>	<b>6,149,974</b>	<b>153,227,969</b>	<b>171,274,810</b>	<b>18,046,841</b>	<b>11.78%</b>	<b>18,046,841</b>	<b>11.78%</b>	<b>171,274,810</b>	<b>24,196,815</b>	<b>16.45%</b>
General Service w/ Demand	16,998,369	640,098	17,638,468	19,053,318	1,414,851	8.02%	1,414,851	8.02%	19,053,318	2,054,949	12.09%
General Service w/o Demand	5,669,225	206,592	5,875,817	7,232,217	1,356,400	23.08%	1,356,400	23.08%	7,232,217	1,562,992	27.57%
Lighting & Power Sec	100,037,248	4,206,300	104,243,548	123,875,060	19,631,513	18.83%	19,631,513	18.83%	123,875,060	23,837,812	23.83%
Lighting & Power Pri	23,827,679	1,068,781	24,896,460	25,180,324	283,864	1.14%	283,864	1.14%	25,180,324	1,352,645	5.68%
Cotton Gin	265,617	18,170	283,787	470,609	186,822	65.83%	186,822	65.83%	470,609	204,993	77.18%
Large Lighting & Power Pri	5,298,104	240,342	5,538,446	6,202,089	663,643	11.98%	663,643	11.98%	6,202,089	903,985	17.06%
Large Lighting & Power Tran	22,387,847	1,082,875	23,470,723	28,418,492	4,947,770	21.08%	4,947,770	21.08%	28,418,492	6,030,645	26.94%
Metal Melting-Sec	143,749	7,277	151,026	182,108	31,082	20.58%	31,082	20.58%	182,108	38,358	26.68%
Metal Melting-Pri	1,402,858	93,452	1,496,310	1,760,358	264,047	17.65%	264,047	17.65%	1,760,358	357,500	25.48%
Metal Melting-Tran	1,498,929	173,479	1,672,408	1,414,988	(257,421)	-15.39%	(257,421)	-15.39%	1,414,988	(83,941)	-5.60%
Oilfield Pri	10,636,387	498,564	11,134,950	12,938,130	1,803,180	16.19%	1,803,180	16.19%	12,938,130	2,301,743	21.64%
Oilfield Sec	588,848	2,543	591,392	994,153	402,761	68.10%	402,761	68.10%	994,153	405,305	68.83%
<b>Total Commercial &amp; Industrial</b>	<b>188,754,861</b>	<b>8,238,473</b>	<b>196,993,335</b>	<b>227,721,847</b>	<b>30,728,513</b>	<b>15.60%</b>	<b>30,728,513</b>	<b>15.60%</b>	<b>227,721,847</b>	<b>38,966,986</b>	<b>20.64%</b>
Municipal Pumping	2,279,333	111,135	2,390,468	2,441,643	51,176	2.14%	56,486	2.36%	2,446,954	167,622	7.35%
Municipal Service	1,650,219	51,385	1,701,604	1,481,439	(220,165)	-12.94%	(216,943)	-12.75%	1,484,661	(165,558)	-10.03%
Municipal Lighting	2,267,085	84,359	2,351,444	2,450,631	99,187	4.22%	104,517	4.44%	2,455,961	188,876	8.33%
Public Street & Hwy Lighting	30,170	3,277	33,447	90,456	57,010	170.45%	43,146	129.00%	76,593	46,423	153.87%
<b>Total Muni &amp; Muni Lighting</b>	<b>6,226,806</b>	<b>250,156</b>	<b>6,476,962</b>	<b>6,464,169</b>	<b>(12,793)</b>	<b>-0.20%</b>	<b>(12,793)</b>	<b>-0.20%</b>	<b>6,464,169</b>	<b>237,363</b>	<b>3.81%</b>
Private, Outdoor, Area Lighting	4,150,616	156,828	4,307,444	4,523,490	216,046	5.02%	216,046	5.02%	4,523,490	372,873	8.98%
Customer-Owned Lighting	293,022	31,071	324,093	393,765	69,672	21.50%	69,672	21.50%	393,765	100,742	34.38%
<b>Total Lighting</b>	<b>4,443,639</b>	<b>187,898</b>	<b>4,631,537</b>	<b>4,917,254</b>	<b>285,717</b>	<b>6.17%</b>	<b>285,717</b>	<b>6.17%</b>	<b>4,917,254</b>	<b>473,616</b>	<b>10.66%</b>
<b>Total Firm Retail</b>	<b>346,503,301</b>	<b>14,826,502</b>	<b>361,329,802</b>	<b>410,378,080</b>	<b>49,048,278</b>	<b>13.57%</b>	<b>49,048,278</b>	<b>13.57%</b>	<b>410,378,080</b>	<b>63,874,780</b>	<b>18.43%</b>

Staff's Revenue Distribution

Attachment AN-6

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Revenue Distribution Phase IV											
Class	Present Base Revenue	TCRF + DCRF Revenue	Present Base + TCRF + DCRF Revenue	Cost-Based Electric Revenue	Cost-Based Total Bill Change	Cost-Based % Change	Target Net Total Bill Change	Target Net % Change	Phase I Revenue Requirement	Phase I Gross Revenue Change	Phase I Gross % Change
<b>Residential</b>	<b>147,077,995</b>	<b>6,149,974</b>	<b>153,227,969</b>	<b>171,274,810</b>	<b>18,046,841</b>	<b>11.78%</b>	<b>18,046,841</b>	<b>11.78%</b>	<b>171,274,810</b>	<b>24,196,815</b>	<b>16.45%</b>
General Service w/ Demand	16,998,369	640,098	17,638,468	19,053,318	1,414,851	8.02%	1,414,851	8.02%	19,053,318	2,054,949	12.09%
General Service w/o Demand	5,669,225	206,592	5,875,817	7,232,217	1,356,400	23.08%	1,356,400	23.08%	7,232,217	1,562,992	27.57%
Lighting & Power Sec	100,037,248	4,206,300	104,243,548	123,875,060	19,631,513	18.83%	19,631,513	18.83%	123,875,060	23,837,812	23.83%
Lighting & Power Pri	23,827,679	1,068,781	24,896,460	25,180,324	283,864	1.14%	283,864	1.14%	25,180,324	1,352,645	5.68%
Cotton Gin	265,617	18,170	283,787	470,609	186,822	65.83%	186,822	65.83%	470,609	204,993	77.18%
Large Lighting & Power Pri	5,298,104	240,342	5,538,446	6,202,089	663,643	11.98%	663,643	11.98%	6,202,089	903,985	17.06%
Large Lighting & Power Tran	22,387,847	1,082,875	23,470,723	28,418,492	4,947,770	21.08%	4,947,770	21.08%	28,418,492	6,030,645	26.94%
Metal Melting-Sec	143,749	7,277	151,026	182,108	31,082	20.58%	31,082	20.58%	182,108	38,358	26.68%
Metal Melting-Pri	1,402,858	93,452	1,496,310	1,760,358	264,047	17.65%	264,047	17.65%	1,760,358	357,500	25.48%
Metal Melting-Tran	1,498,929	173,479	1,672,408	1,414,988	(257,421)	-15.39%	(257,421)	-15.39%	1,414,988	(83,941)	-5.60%
Oilfield Pri	10,636,387	498,564	11,134,950	12,938,130	1,803,180	16.19%	1,803,180	16.19%	12,938,130	2,301,743	21.64%
Oilfield Sec	588,848	2,543	591,392	994,153	402,761	68.10%	402,761	68.10%	994,153	405,305	68.83%
<b>Total Commercial &amp; Industrial</b>	<b>188,754,861</b>	<b>8,238,473</b>	<b>196,993,335</b>	<b>227,721,847</b>	<b>30,728,513</b>	<b>15.60%</b>	<b>30,728,513</b>	<b>15.60%</b>	<b>227,721,847</b>	<b>38,966,986</b>	<b>20.64%</b>
Municipal Pumping	2,279,333	111,135	2,390,468	2,441,643	51,176	2.14%	51,176	2.14%	2,441,643	162,311	7.12%
Municipal Service	1,650,219	51,385	1,701,604	1,481,439	(220,165)	-12.94%	(220,165)	-12.94%	1,481,439	(168,780)	-10.23%
Municipal Lighting	2,267,085	84,359	2,351,444	2,450,631	99,187	4.22%	99,187	4.22%	2,450,631	183,546	8.10%
Public Street & Hwy Lighting	30,170	3,277	33,447	90,456	57,010	170.45%	57,010	170.45%	90,456	60,287	199.82%
<b>Total Muni &amp; Muni Lighting</b>	<b>6,226,806</b>	<b>250,156</b>	<b>6,476,962</b>	<b>6,464,169</b>	<b>(12,793)</b>	<b>-0.20%</b>	<b>(12,793)</b>	<b>-0.20%</b>	<b>6,464,169</b>	<b>237,363</b>	<b>3.81%</b>
Private, Outdoor, Area Lighting	4,150,616	156,828	4,307,444	4,523,490	216,046	5.02%	216,046	5.02%	4,523,490	372,873	8.98%
Customer-Owned Lighting	293,022	31,071	324,093	393,765	69,672	21.50%	69,672	21.50%	393,765	100,742	34.38%
<b>Total Lighting</b>	<b>4,443,639</b>	<b>187,898</b>	<b>4,631,537</b>	<b>4,917,254</b>	<b>285,717</b>	<b>6.17%</b>	<b>285,717</b>	<b>6.17%</b>	<b>4,917,254</b>	<b>473,616</b>	<b>10.66%</b>
<b>Total Firm Retail</b>	<b>346,503,301</b>	<b>14,826,502</b>	<b>361,329,802</b>	<b>410,378,080</b>	<b>49,048,278</b>	<b>13.57%</b>	<b>49,048,278</b>	<b>13.57%</b>	<b>410,378,080</b>	<b>63,874,780</b>	<b>18.43%</b>

RATE SHEET	RATE CLASS	TYPE OF RATE	Current Rates	SWEPCO Proposed Rates	Staff Proposed Rates	
IV-1	Residential	Customer Charge	\$ 8.00	\$ 10.00	\$ 9.38	per customer
		Net Metering Admin Fee	\$ 8.00	\$ 10.00	\$ 9.38	per customer
		kWh Charge (on peak)	\$ 0.072266	\$ 0.092448	\$ 0.084155	per kWh
		Block 1 kWh Charge	\$ 0.053589	\$ 0.068555	\$ 0.062405	per kWh
		Block 2 kWh Charge	\$ 0.043789	\$ 0.056855	\$ 0.051015	per kWh
IV-2	General Service W/D	Customer Charges	\$ 11.59	\$ 15.00	\$ 13.00	per customer
		Net Metering Admin Fee	\$ 8.00	\$ 10.00	\$ 9.38	
		Block 2 kW Charge	\$ 4.87	\$ 2.95	\$ 5.46	per kW
		kWh Charge	\$ 0.061302	\$ 0.075419	\$ 0.068963	per kWh
IV-2	General Service Wo/D	Customer Charges	\$ 11.59	\$ 15.00	\$ 13.00	per customer
		kWh Charge	\$ 0.061302	\$ 0.089950	\$ 0.082233	per kWh
IV-3	Lighting & Power Secondary	Block 2 kW Charge	\$ 9.38	\$ 12.48	\$ 9.69	per kW
		kWh Charge	\$ 0.016155	\$ 0.022038	\$ 0.016448	per kWh
	Lighting & Power Primary	Block 2 kW Charge	\$ 9.16	\$ 12.18	\$ 9.69	per kW
		kWh Charge	\$ 0.014904	\$ 0.020470	\$ 0.016448	per kWh
IV-4	Large Lighting & Power Primary	Block 2 kW Charge	\$ 10.02	\$ 13.32	\$ 11.74	per kW
		kWh Charge	\$ 0.010382	\$ 0.013816	\$ 0.012166	per kWh
IV-4	Large Lighting & Power Transmission	Block 2 kW Charge	\$ 6.87	\$ 7.93	\$ 7.51	per kW
		kWh Charge	\$ 0.010382	\$ 0.012212	\$ 0.012010	per kWh
		Synchronized Self Generation Load	\$ -	\$ 2.20	\$ 2.20	per CP kW
Various		kVAR charge	\$ 0.51	\$ 0.66	\$ 0.60	per kVAR
		Additional Transformer Cap	\$ 1.60	\$ 2.08	\$ 1.89	per kVAR
IV-6	Metal Melting-Secondary	Block 2 kW Charge	\$ 4.63	\$ 6.16	\$ 5.70	per kW
		kWh Charge	\$ 0.015014	\$ 0.019925	\$ 0.019708	per kWh
	Metal Melting-Primary	Block 2 kW Charge	\$ 4.54	\$ 6.04	\$ 5.33	per kW
		kWh Charge	\$ 0.014613	\$ 0.019422	\$ 0.017188	per kWh
IV-7	Metal Melting-69kV	Block 2 kW Charge	\$ 3.42	\$ 4.55	\$ 3.23	per kVA
		kWh Charge	\$ 0.010211	\$ 0.013569	\$ 0.009654	per kWh
IV-8	Off Peak Rider	Customer Charge	\$ 81.14	\$ 107.90	\$ 97.89	per customer
IV-13	Oilfield Service	Primary kW Charge	\$ 7.93	\$ 10.55	\$ 9.66	per kW
		Primary kWh Charge	\$ 0.01155	\$ 0.015507	\$ 0.013986	per kWh
		Secondary kW Charge	\$ 8.29	\$ 11.02	\$ 11.91	per kW
		Secondary kWh Charge	\$ 0.01209	\$ 0.016109	\$ 0.017269	per kWh
IV-14	Cotton Gin Service	Customer Charge	\$ 29.21	\$ 38.84	\$ 44.63	per customer
		Per kWh (May-Oct)	\$ 0.097105	\$ 0.129129	\$ 0.148359	per kWh
		Per kWh (Nov - Apr)	\$ 0.050171	\$ 0.066717	\$ 0.075492	per kWh
IV-19	Municipal Pumping	kWh Charge	\$ 0.036899	\$ 0.041875	\$ 0.039791	per kWh
IV-20	Municipal Service	kWh Charge	\$ 0.058369	\$ 0.066241	\$ 0.052750	per kWh
IV-21/22	Recreational Lighting and Customer-Supplied Lighting	Customer Charge	\$ 7.35	\$ 10.01	\$ 9.88	per customer
		kWh Charge	\$ 0.040229	\$ 0.055472	\$ 0.054170	per kWh

IV-23	MUNICIPAL STREET LIGHTING					
IV-24						
IV-25	<u>Rate Code 521</u>					
IV-31	175W Mercury Vapor	Wood/Overhead	\$ 8 71	\$ 6 84	\$ 9 01	per fixture
	400W Mercury Vapor	Wood/Overhead	\$ 14 82	\$ 11 63	\$ 15 33	
	400W Mercury Vapor	Non-Wood/Overhead	\$ 16 44	\$ 12 91	\$ 17 01	
	400W Mercury Vapor	Base-Mounted/Overhead	\$ 18 24	\$ 14 32	\$ 18 87	
	400W Mercury Vapor	Base-Mounted/Underground	\$ 20 44	\$ 16 05	\$ 21 14	
	70W High Pressure Sodium	Wood/Overhead	\$ 10 51	\$ 8 25	\$ 10 87	
	70W High Pressure Sodium	Non-Wood/Overhead	\$ 12 13	\$ 9 52	\$ 12 55	
	70W High Pressure Sodium	Base-Mounted/Overhead	\$ 13 92	\$ 10 93	\$ 14 40	
	70W High Pressure Sodium	Non-Wood/Underground	\$ 14 34	\$ 11 26	\$ 14 83	
	70W High Pressure Sodium	Base-Mounted/Underground	\$ 16 12	\$ 12 65	\$ 16 68	
	150W High Pressure Sodium	Wood/Overhead	\$ 19 21	\$ 15 08	\$ 19 87	
	150W High Pressure Sodium	Non-Wood/Overhead	\$ 20 84	\$ 16 36	\$ 21 56	
	150W High Pressure Sodium	Base-Mounted/Overhead	\$ 22 65	\$ 17 78	\$ 23 43	
	150W High Pressure Sodium	Non-Wood/Underground	\$ 23 05	\$ 18 09	\$ 23 85	
	150W High Pressure Sodium	Base-Mounted/Underground	\$ 24 84	\$ 19 50	\$ 25 70	
	250W High Pressure Sodium	Wood/Overhead	\$ 22 31	\$ 17 51	\$ 23 08	
	250W High Pressure Sodium	Non-Wood/Overhead	\$ 23 94	\$ 18 79	\$ 24 77	
	250W High Pressure Sodium	Base-Mounted/Overhead	\$ 25 72	\$ 20 19	\$ 26 61	
	250W High Pressure Sodium	Non-Wood/Underground	\$ 26 14	\$ 20 52	\$ 27 04	
	250W High Pressure Sodium	Base-Mounted/Underground	\$ 27 93	\$ 21 93	\$ 28 89	
	300W High Pressure Sodium	Wood/Overhead	\$ 32 58	\$ 25 58	\$ 33 70	
	300W High Pressure Sodium	Non-Wood/Overhead	\$ 34 21	\$ 26 85	\$ 35 39	
	300W High Pressure Sodium	Base-Mounted/Overhead	\$ 36 00	\$ 28 26	\$ 37 24	
	300W High Pressure Sodium	Non-Wood/Underground	\$ 36 41	\$ 28 58	\$ 37 67	
	300W High Pressure Sodium	Base-Mounted/Underground	\$ 38 20	\$ 29 99	\$ 39 52	
	500W High Pressure Sodium	Wood/Overhead	\$ 36 65	\$ 28 77	\$ 37 91	
	500W High Pressure Sodium	Non-Wood/Overhead	\$ 38 28	\$ 30 05	\$ 39 60	
	500W High Pressure Sodium	Base-Mounted/Overhead	\$ 40 07	\$ 31 45	\$ 41 45	
	500W High Pressure Sodium	Non-Wood/Underground	\$ 40 48	\$ 31 78	\$ 41 88	
	500W High Pressure Sodium	Base-Mounted/Underground	\$ 42 26	\$ 33 17	\$ 43 72	
	35W Low Pressure Sodium	Wood/Overhead	\$ 10 67	\$ 8 38	\$ 11 04	
	55W Low Pressure Sodium	Wood/Overhead	\$ 10 67	\$ 8 38	\$ 11 04	
	55W Low Pressure Sodium	Non-Wood/Overhead	\$ 12 29	\$ 9 65	\$ 12 71	
	55W Low Pressure Sodium	Base-Mounted/Overhead	\$ 14 09	\$ 11 06	\$ 14 58	
	90W Low Pressure Sodium	Wood/Overhead	\$ 20 36	\$ 15 98	\$ 21 06	
	90W Low Pressure Sodium	Non-Wood/Overhead	\$ 21 99	\$ 17 26	\$ 22 75	
	90W Low Pressure Sodium	Base-Mounted/Overhead	\$ 23 79	\$ 18 68	\$ 24 61	
	90W Low Pressure Sodium	Non-Wood/Underground	\$ 24 19	\$ 18 99	\$ 25 02	
	90W Low Pressure Sodium	Base-Mounted/Underground	\$ 25 99	\$ 20 40	\$ 26 89	
	180W Low Pressure Sodium	Wood/Overhead	\$ 34 61	\$ 27 17	\$ 35 80	
	180W Low Pressure Sodium	Non-Wood/Overhead	\$ 36 24	\$ 28 45	\$ 37 49	
	180W Low Pressure Sodium	Base-Mounted/Overhead	\$ 38 04	\$ 29 86	\$ 39 35	
	180W Low Pressure Sodium	Non-Wood/Underground	\$ 38 44	\$ 30 18	\$ 39 77	
	180W Low Pressure Sodium	Base-Mounted/Underground	\$ 40 24	\$ 31 59	\$ 41 63	
	<u>Rate Code 529-(CLOSED)</u>					
	75W Mercury Vapor		\$ 4 18	\$ 5 27	\$ 4 32	per fixture
	100W Mercury Vapor		\$ 4 61	\$ 5 81	\$ 4 77	
	400W Mercury Vapor		\$ 9 39	\$ 11 83	\$ 9 71	
	<u>Rate Code 528 (OPEN)</u>					
	100W Mercury Vapor		\$ 2 01	\$ 2 53	\$ 2 08	per fixture
	175W Mercury Vapor		\$ 2 75	\$ 3 46	\$ 2 84	
	250W Mercury Vapor		\$ 3 80	\$ 4 79	\$ 3 93	
	150W Mercury Vapor		\$ 5 60	\$ 7 06	\$ 5 79	
	400W Metal Halide		\$ 4 96	\$ 6 25	\$ 5 13	
	400W Metal Halide		\$ 6 45	\$ 8 13	\$ 6 67	
	1000W Metal Halide		\$ 15 00	\$ 18 90	\$ 15 52	
	70W High Pressure Sodium		\$ 2 11	\$ 2 66	\$ 2 18	
	100W High Pressure Sodium		\$ 2 75	\$ 3 46	\$ 2 84	
	150W High Pressure Sodium		\$ 3 07	\$ 3 87	\$ 3 18	
	250W High Pressure Sodium		\$ 4 54	\$ 5 72	\$ 4 70	
	400W High Pressure Sodium		\$ 6 45	\$ 8 13	\$ 6 67	
	1000W High Pressure Sodium		\$ 14 90	\$ 18 77	\$ 15 41	



	<u>Rate Code 538 (CLOSED)</u>					
	6,000L Incandescent		\$ 8 71	\$ 10 97	\$ 9 01	per fixture
	16000L Mercury Vapor Wood		\$ 9 05	\$ 11 40	\$ 9 36	
	<u>Rate Code 535 (OPEN)</u>					
	100W Mercury Vapor		\$ 2 53	\$ 3 19	\$ 2 62	
	175W Mercury Vapor		\$ 3 49	\$ 4 40	\$ 3 61	
	250W Mercury Vapor		\$ 4 80	\$ 6 05	\$ 4 97	
	400W Mercury Vapor		\$ 7 06	\$ 8 89	\$ 7 30	
	1000W Mercury Vapor		\$ 15 83	\$ 19 94	\$ 16 38	
	150W Metal Halide		\$ 6 26	\$ 7 89	\$ 6 48	
	400W Metal Halide		\$ 8 14	\$ 10 26	\$ 8 42	
	1000W Metal Halide		\$ 18 92	\$ 23 84	\$ 19 57	
	70W High Pressure Sodium		\$ 2 66	\$ 3 35	\$ 2 75	
	100W High Pressure Sodium		\$ 3 48	\$ 4 38	\$ 3 60	
	150W High Pressure Sodium		\$ 3 87	\$ 4 88	\$ 4 00	
	250W High Pressure Sodium		\$ 5 73	\$ 7 22	\$ 5 93	
	400W High Pressure Sodium		\$ 8 14	\$ 10 26	\$ 8 42	
	1000W High Pressure Sodium		\$ 18 75	\$ 23 62	\$ 19 40	
IV-26 IV-27	PUBLIC STREET & HIGHWAY LIGHTING					
	<u>Rate Codes 534, 539, 739 (OPEN)</u>					
	100W Mercury Vapor		\$ 1 38	\$ 1 57	\$ 2 37	per fixture
	175W Mercury Vapor		\$ 2 12	\$ 2 41	\$ 3 65	
	250W Mercury Vapor		\$ 3 20	\$ 3 63	\$ 5 51	
	400W Mercury Vapor		\$ 5 01	\$ 5 69	\$ 8 62	
	1000W Mercury Vapor		\$ 11 73	\$ 13 31	\$ 20 18	
	400W Metal Halide		\$ 5 00	\$ 5 67	\$ 8 60	per fixture
	1000W Metal Halide		\$ 12 01	\$ 13 63	\$ 20 66	
	70W High Pressure Sodium		\$ 1 08	\$ 1 23	\$ 1 86	
	100W High Pressure Sodium		\$ 1 60	\$ 1 82	\$ 2 75	
	150W High Pressure Sodium		\$ 1 92	\$ 2 18	\$ 3 30	
	250W High Pressure Sodium		\$ 3 41	\$ 3 87	\$ 5 87	
	400W High Pressure Sodium		\$ 5 34	\$ 6 06	\$ 9 19	
	1000W High Pressure Sodium		\$ 12 46	\$ 14 14	\$ 21 44	
IV-28 IV-29 IV-30 IV-32 IV-33	PRIVATE, OUTDOOR & AREA LIGHTING					
	Private 2500L Incandescent		\$ 4 54	\$ 6 15	\$ 5 28	per fixture
	Private 7700 Mercury Vapor		\$ 6 05	\$ 8 19	\$ 7 05	
	Private 7700 w/Pole Mercury Vapor		\$ 6 05	\$ 8 19	\$ 7 05	
	Area 100W Mercury Vapor		\$ 5 42	\$ 7 34	\$ 6 31	per fixture
	Area 175W Mercury Vapor		\$ 6 05	\$ 8 19	\$ 7 05	
	Area 250W Mercury Vapor		\$ 6 84	\$ 9 26	\$ 7 97	
	Area 400W Mercury Vapor		\$ 8 17	\$ 11 06	\$ 9 51	
	Area 1000W Mercury Vapor		\$ 13 43	\$ 18 18	\$ 15 64	
	Area 400W Metal Halide		\$ 4 79	\$ 6 48	\$ 5 58	
	Area 1000W Metal Halide		\$ 11 14	\$ 15 08	\$ 12 97	
	Area 100W High Pressure Sodium		\$ 2 05	\$ 2 78	\$ 2 39	
	Area 250W High Pressure Sodium		\$ 3 38	\$ 4 58	\$ 3 94	
	Area 400W High Pressure Sodium		\$ 4 79	\$ 6 48	\$ 5 58	
	Area 1000W High Pressure Sodium		\$ 11 07	\$ 14 99	\$ 12 89	
	Outdoor 175W Mercury Vapor		\$ 8 14	\$ 11 02	\$ 9 48	per fixture
	Outdoor 400W Mercury Vapor		\$ 11 37	\$ 15 39	\$ 13 24	
	Outdoor 70W High Pressure Sodium		\$ 8 60	\$ 11 64	\$ 10 02	
	Outdoor 150W High Pressure Sodium		\$ 12 00	\$ 16 24	\$ 13 97	
	Floodlighting 250W Metal Halide		\$ 9 26	\$ 12 53	\$ 10 78	per fixture
	Floodlighting 400W Metal Halide		\$ 10 53	\$ 14 25	\$ 12 26	
	Floodlighting 1000W Metal Halide		\$ 18 97	\$ 25 68	\$ 22 09	
	Floodlighting 150W High Pressure Sodium		\$ 7 98	\$ 10 80	\$ 9 29	
	Floodlighting 250W High Pressure Sodium		\$ 9 16	\$ 12 40	\$ 10 67	
	Floodlighting 400W High Pressure Sodium		\$ 10 37	\$ 14 04	\$ 12 08	
	Floodlighting 1000W High Pressure Sodium		\$ 18 82	\$ 25 48	\$ 21 92	